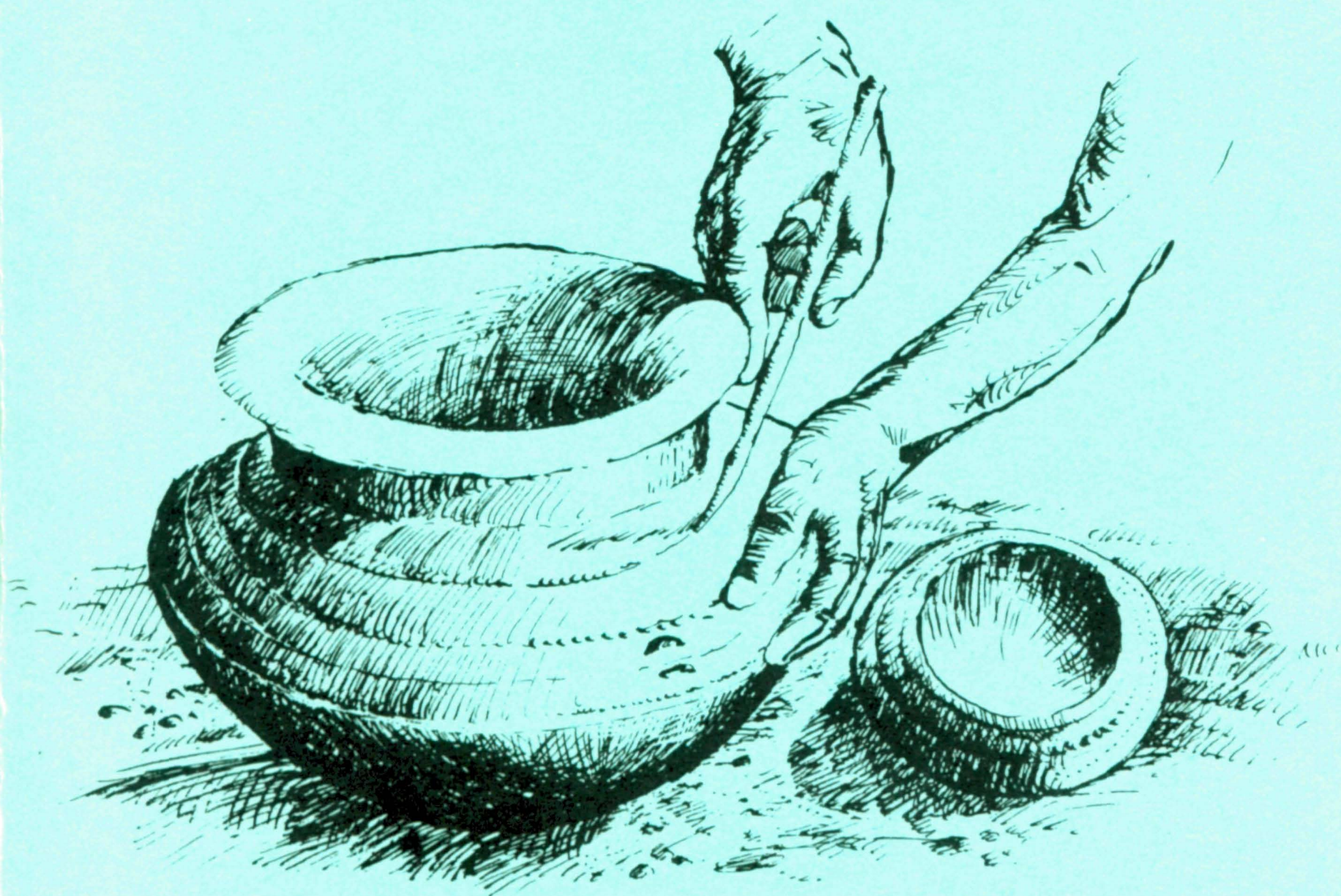


AFRICAN OCCASIONAL PAPERS
NO. 2

Bono Manso:

**An Archaeological Investigation
Into Early Akan Urbanism**

Kwaku Effah-Gyamfi



**Department of Archaeology
The University of Calgary Press
Calgary
1985**

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Dr. Effah-Gyamfi died in the summer of 1983 before the editing of his thesis was complete. He has therefore not been able to see the published version and the editor has to take full responsibility for it.

Dr. Effah-Gyamfi was a most promising and able archaeologist and his death is a serious loss to West African scholarship. The thesis published here was the first to be presented for a Ph.D. at the University of Ghana. The editor deeply regrets that it is now issued as a memorial to the author and not as the first of the series of publications that was to be hoped for.

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Editor's Introduction

Since the aim of this series is to make the factual information contained in hard to get theses available, the editor has, with permission from the author, in most cases reduced the text so as to shorten the thesis and highlight the facts. Theses for higher degrees frequently contain general discussions in which the writer's theoretical position is defined and more general matters dealt with. If readers wish to learn more about such matters, the complete theses are with their original writers as well as being deposited in the Universities which granted the degrees. The editor of the series also holds a xerox copy of the whole thesis and with permission from the author, could make it available.

Dr. Effah-Gyamfi's work was completed for the Ph.D. of the University of Ghana and in his original preface he explained

"Between 1973 and 1977 the writer was engaged in an archaeological research project in the Takyiman - Nkoransa district of the Brong-Ahafo Region, Ghana. The first part of the project, which was undertaken between 15th July and 30th September, 1973, was an M.A. research aimed at using Oral Tradition and archaeology as two complementary sources in discerning the origins and development of an early Akan state, Bono. Part of this thesis has been published by the Institute of African Studies Publications Section, University of Ghana, Legon under the title, Traditional History of the Bono State: An Archaeological Approach, (duplicated text).

The second part of the project which was undertaken for the writer's doctoral dissertation was aimed principally at investigating a capital town, Bono Manso, within the context of early Akan urbanism. And the present book is based mainly on this latter project."

The thesis was dedicated to his late grandfather, Kwasi Kunsu.

In the first chapter of the thesis the author discussed the nature and definition of urbanism and criticised the view that there was no urban development in Africa until modern times. He provided

many examples of African towns which had developed and flourished before the arrival of Europeans and pointed out that urbanism "can only be defined through the eyes and minds of the culture group concerned." He then gave a short account of what urban sites had been examined in West Africa.

Chapter II dealt with the state of research and the geographical setting of the Bono Manso area. The area of his study is shown in the map (fig.1). Others, mainly non-archaeologists, who had worked on the traditions and history of the Bono state and its capital Bono-Manso may be listed here with dates of publication of their work:

Reindorf (1889)
 Rattray (1923, 1927)
 Meyerowitz (1949, 1950, 1958, 1960, 1962a, 1974)
 Ward (1958)
 Anquandah (1965)
 Daaku (1966)
 Warren (1970a, 1970b, 1971a, 1971b)
 Flight (1970)
 Stride and Ifeka (1971)
 Davies (1972)
 Effah-Gyamfi (1975a, 1975b)
 Posnansky (1975)

The work of Meyerowitz, in particular, and her attachment to the idea of a northern origin for the Akan people, is strongly criticised and several of her published translations of traditional sayings and songs are shown to be defective.

The chapter then went on to state the research aims and to discuss some of the problems, and the original text, somewhat revised and shortened is given here:

The severe criticisms levelled against Meyerowitz's work on the Bono state call for a fresh study of this early state. (For comments and queries about Meyerowitz's work, see Irwin 1961; Boahen 1966; Levtzion 1968; Flight 1970; Warren 1970a; and Effah-Gyamfi 1974).

In this connection the archaeological survey of Bono Manso was considered a useful starting point. Being the capital of the state, not only would the information that would be provided be useful in understanding this former state, but it might also throw light on early Akan history in general. Moreover, the archaeological information would be useful for the understanding of early Ghanaian towns. Being close to Begho, which is widely claimed as one of the earliest commercial towns to emerge in modern Ghana (Wilks 1962; Goody 1964; Posnansky 1971, 1973b), it was hoped that information obtained from Bono Manso would aid a study of early towns in Ghana in general and Akan towns in particular. For if, as oral traditions from many Akan traditional states in Ghana claim, the Bono state was one of the earliest such states to develop, then the study of its capital town would be crucial for information on the processes and nature of Akan urbanism. Were Akan towns walled as was frequently the case in Nigeria? What was the morphology of early Akan towns? Did early Akan towns contain quarters with different ethnic groups or populations as is recorded of the old Sudanic capitals? These are some of the questions which archaeologists need to attempt to answer.

In brief, it was the dearth of archaeological information on pre-colonial towns coupled with the criticisms of Meyerowitz's work on the Bono state that prompted the writer to initiate this study. The study is an attempt to fill some of the gaps in the information available about early Akan towns and to provide a basis for future research. The approach is simple. Since 1973 oral data collection concerning the Bono state has been undertaken by the writer. The available information has enabled a synthesis of the oral history of the state to be made (Effah-Gyamfi 1974, 1975a). Based on the oral information, settlement sites related to the state have been located and some have been surveyed and mapped. Using the combined information from archaeology and oral history, an attempt has been made to reconstruct the culture history of the Bono Manso area. This attempt has provided a basis for more detailed field survey and excavations at the Bono Manso site. In addition, relevant neighbouring sites have been compared with Bono Manso, for information

on size, function and chronological sequence.

Any attempt at studying town sites in West Africa is beset with a number of problems. In the case of Bono Manso the following problems are considered pertinent:

Firstly, there is a direct correlation of financial resources with the extent of research work at any archaeological site. There will be severe limitations on the extent of excavations using a grant of not more than £5,000 (as was the case with Bono Manso). In such a case, areal excavations cannot be conducted, with the result that information on house plans, spatial distribution and relationships of objects and features, cannot be obtained. This seriously limits the amount of information needed from an urban settlement, and means that data from Bono Manso can only be used for provisional assessment of the site. But it is hoped that by a thorough reconnaissance, systematic collection of surface finds and test excavations of sample areas, a beginning has been made.

Secondly, even if areal excavations are conducted, archaeology cannot provide explanations to all the questions about a capital town. Located in the central part of Ghana, Bono Manso did not have the advantage of featuring prominently in Arab and European records. For this reason the available oral information will be used in the succeeding chapters where necessary to provide a cross-check on the archaeological work at Bono Manso. A third problem is the alarming rate at which, owing to modern cash cropping activities, many of the archaeological sites are being destroyed. At Bono Manso the inhabitants of the modern village have 'scrambled' for parcels of land for cultivation. This land, they claim (quite rightly) is more fertile than the surrounding areas. As a result of modernization in agriculture, many of these farms are being ploughed by tractors. Thus even though a considerable attempt has been made since 1973 to survey and record features at the site, there is no doubt that many features which could have been easily visible in earlier years are obliterated.

One other problem which seems to affect studies of ancient sites in Ghana is the political and historical attachment to abandoned sites.

Many settlement sites in Ghana are considered sacred, either because they are closely related to modern ethnic groups as their ancestral homes or are used as ritual grounds. It is therefore extremely difficult for an archaeologist to win public confidence when he sets out to work at any of these sites. The writer met opposition when he wanted to excavate a sacred cave related to the Bono state (Effah-Gyamfi 1974, 1975b). Trees were felled across the paths leading to the sacred cave to prevent the archaeological team from excavating. Similar opposition was met by Mr. Boachie-Ansah (1978:17) when he wanted to excavate the sacred hole related to the Wankyi people northwest of Takyiman. In the case of Bono Manso the situation was different. The site represents the ancestral capital of the present people of the Takyiman traditional area. Yet owing to the fact that the capital later fell into the hands of Nkoransa people, Bono Manso is now controlled by the Nkoransa paramount chief. Moreover, almost all the inhabitants of modern Manso trace their ancestry from post-1723 A.D. when Baffo and his followers, all Asante, were settled at the site after most of the original inhabitants had fled to various places. This has had two unfortunate results. Firstly owing to the fact that the inhabitants of modern Manso have no ancestral connection with the site, they have very little knowledge of the important features and locations on the site. Nor can the oral traditions they have connected with the site be considered detailed or even accurate. On the other hand, the people of the Takyiman area who are ancestrally connected with the site have lost touch with Bono Manso and though there are oral traditions which many of the older people have, it is difficult to get them to locate certain features and objects referred to in the traditions and they would meet stiff political opposition from the paramount chief of Nkoransa. Secondly, this lack of access of the Takyiman people to their ancestral capital is often resented and this becomes more serious any time there is news of exciting finds (to the local inhabitants the exciting finds are usually human skeletons!) from the excavations. The Takyiman omanhene (paramount chief) would always wish to pour libations to his ancient ancestors when they are exposed on soil which is politically

not his!

This is the political dilemma in which the writer has had to work since 1973. The situation can be explosive and this requires a high degree of diplomacy and tact to get the two sides to compromise. Long discussions have had to be organised before each of the paramount chiefs could come to a compromise. In such an atmosphere the archaeologist who needs cooperation of the people from the two traditional areas is sometimes faced with either passive resistance or a deliberate distortion of facts. In many ways this situation has been checked by the fact that the writer comes from the area and has so far managed to contact and educate people whenever a potential quarrel between the two traditional areas is detected.

In Ghana where, unlike Nigeria whose ancient towns are often surrounded by easily identifiable walls, the study of pre-colonial urban sites is beset with the problem of knowing their size, morphology and evolution, except after many seasons of intensive fieldwork. In comparison with capital sites in the forest such as Asantemanso (the early capital of the Asante nation); the Bankesieso (capital of Denkyira) however, Bono Manso is fortunately located in the southern guinea savanna zone where during the peak of the dry season, between January and February, it is relatively easy to do surveying. In the forest belt where the former sites are located, the problem of thick vegetation has been such that as yet no archaeological work has been attempted.

(This section has been summarized from the original Chapters I and II).

SOME ARCHAEOLOGICAL SITES ASSOCIATED WITH THE BONO STATE

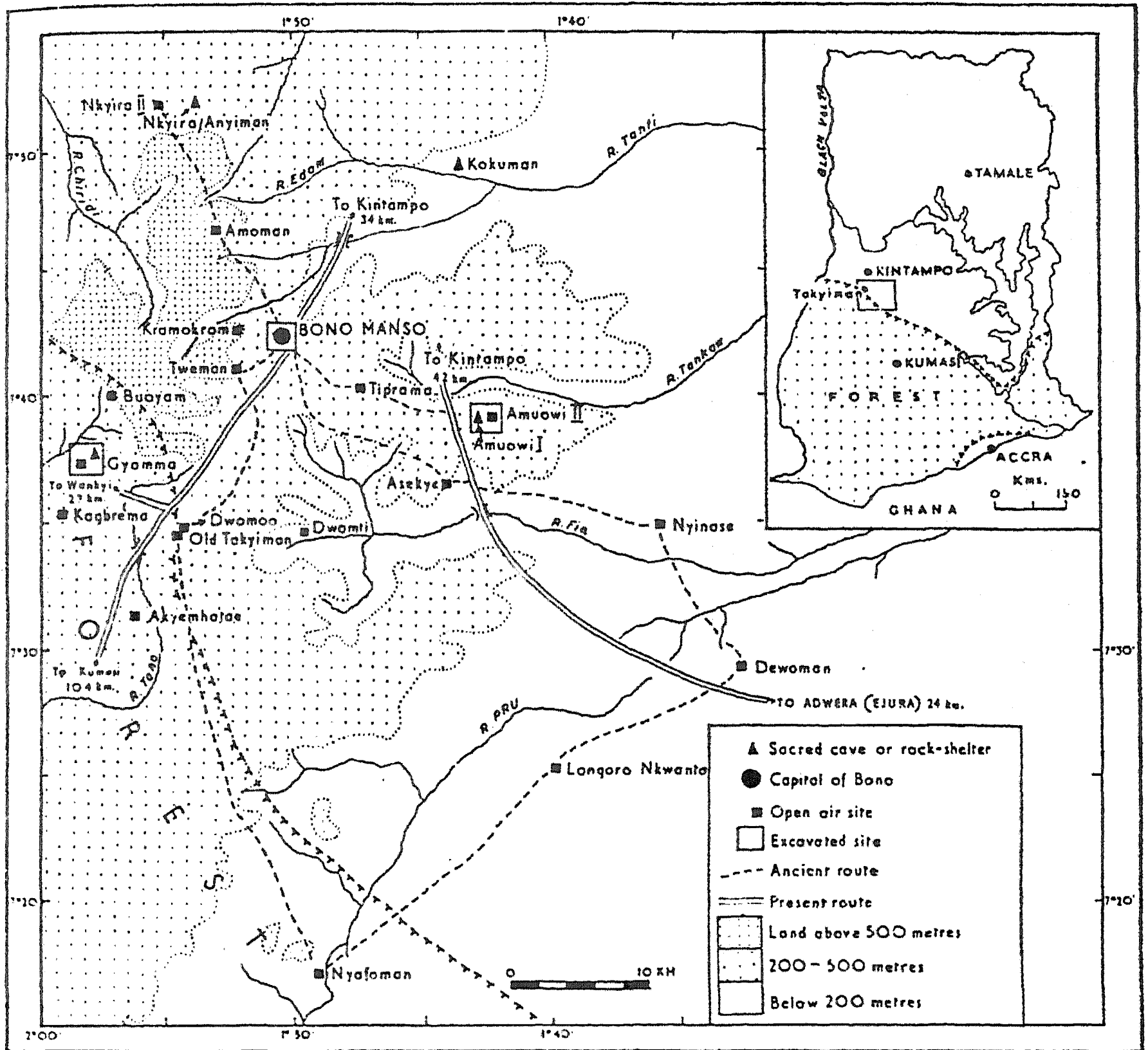


Fig. 1

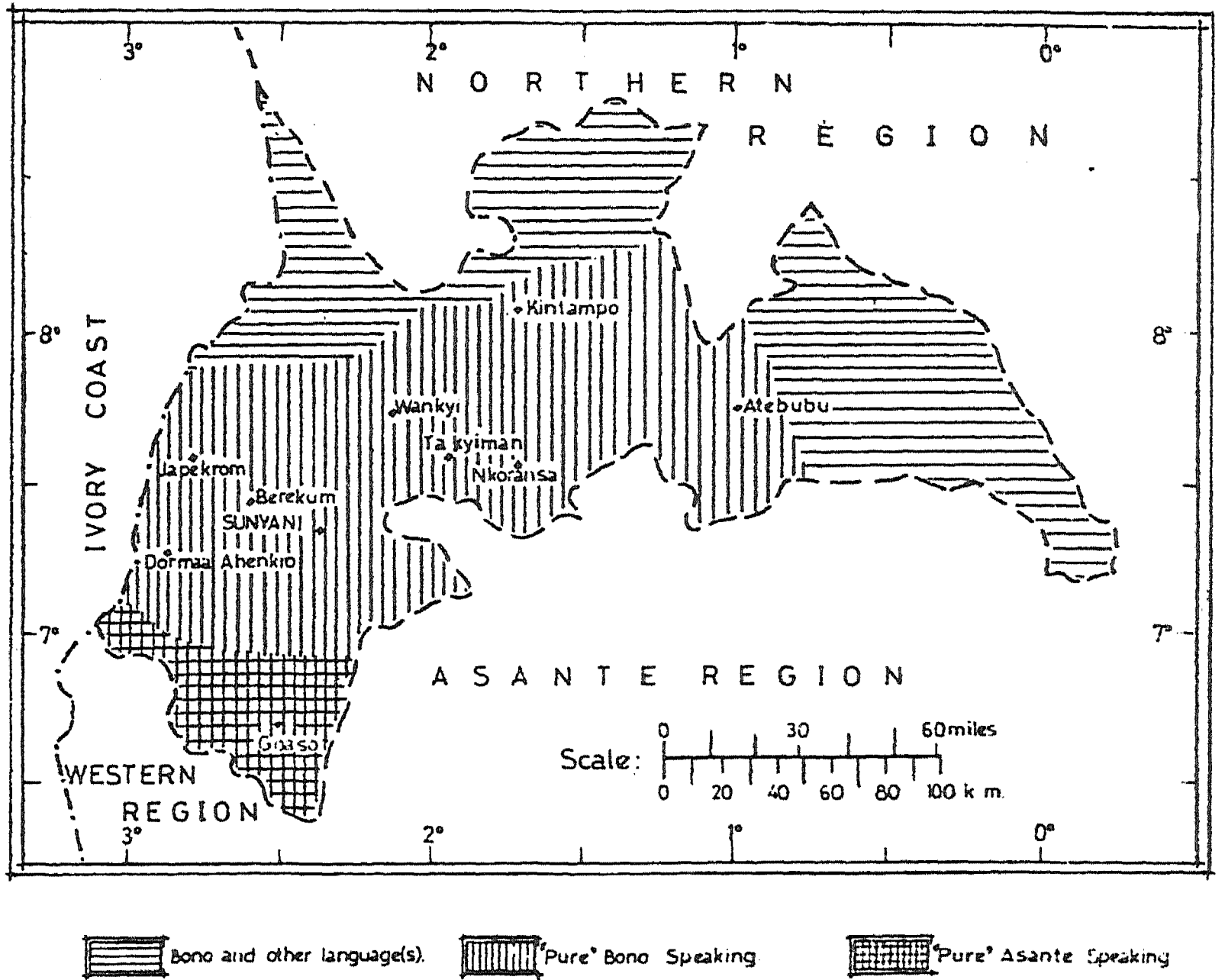


Fig. 2 Main Dialects of the Brong-Ahafo Region.

CHAPTER III

THE BONO STATE IN EARLY AKAN PREHISTORY

(a) Historical Evidence. The name Bono (or Brong as it is commonly pronounced by non-Bono speakers) is now used when referring to the people who speak the Bono dialect of the Twi language. The name is also used in the administrative sense when referring to the greater proportion of the Brong-Ahafo Region of Ghana, excluding Ahafo in its south-western part (fig.2). Originally, however, the name is said to have referred only to the state under consideration. Takyiman oral traditions are strong in claiming that the state was called Bono and not Bono Manso as other writers have called it (see for example, Boahen 1975:10). One of the earliest records we have of early states in Ghana, the Dutch map of 1629 (Daaku and Van-Dantzig, 1966) describes a state called Bonnoe, which, judging from the name and its location, seems to agree with the claim of the Takyiman people. That this is so is further supported by the name of the capital, Bono Manso which literally means 'the seat of the Bono state'. To refer to the state as Bono Manso state would thus seem tautologous.

Takyiman traditions also claim that Bono was a term used for a pioneer - anything first of its kind - and by implication, the Bono state was so-called because it was the earliest to develop in the present Brong-Ahafo Region (some say the whole of Ghana). Such a claim is also emphasized in an abodini (appellation) which is recounted in drum language on festive occasions when the omanhene (paramount chief) of Takyiman sits in state:

"Bono kyempim duoduakwa
 Domankoma boo adee, aboo deeben?
 Oboo Takyiman
 Takyiman firi hen ni?
 Takyiman firi tete
 Takyiman kan, kan, kan".

Thousands of pioneer settlers who were settled anyhow;
 When the creator created things, what did he first create?

He created Takyiman
 Where did Takyiman originate from?
 Takyiman is ancient
 Takyiman, the very, very first.

One striking aspect of the oral traditions of both the Takyiman area and that of the Fante at the coast is the almost identical story that some of the people in the latter area migrated from the former (Effah-Gyamfi, 1974, 1975; Fynn, 1975a, 1975b). Indeed names and titles of the two, now widely separated, areas (see fig.3). are remarkably identical. For example the name Akumfi which is still a stool title in the Takyiman traditional state is also referred to in the Fante area as Ekumfi, though here it is the name of a traditional state. And the heroic leaders Obunumankoma, Adapagya and Osono are mentioned in Takyiman traditions as secessionists who migrated with their followers to the coast; the same people are referred to as founders of the Fante state in some of the Fante traditions (Hutton, 1821:347). Writing in the early nineteenth century, Bowdich (1819) also noted this tradition of former relationship:

"Takyiman is reached the eighth day, whence the Fantees are reported by tradition to have emigrated, and there is yet but little difference in the languages" (p.171).

However, until recently some historians were uncertain as to whether Bono was an Akan state or not. Discussing the origins of the Akan, Boahen (1966) excluded the Bono from the Akan group, largely due to the observation of Rattray at Takyiman in the late 1920's that:

"...the pure Brong are apparently wholly ignorant of these Ashanti and Fanti clan names, and that...their exogamous divisions seem based upon an entirely different model...There, such exogamous divisions as appear to exist apparently take their names from the street or quarters in the towns" (Rattray 1929:64-65).

In a later paper however, Boahen (1974:73) seemed to have shifted his ground and included Takyiman people in the Akan group based on his own field work and that of a linguist, both of which show that Bono is only a dialect of Twi (Dolphyne 1973). Fynn (1975a:25) has also recently pointed out, based on his studies of Fante social and political

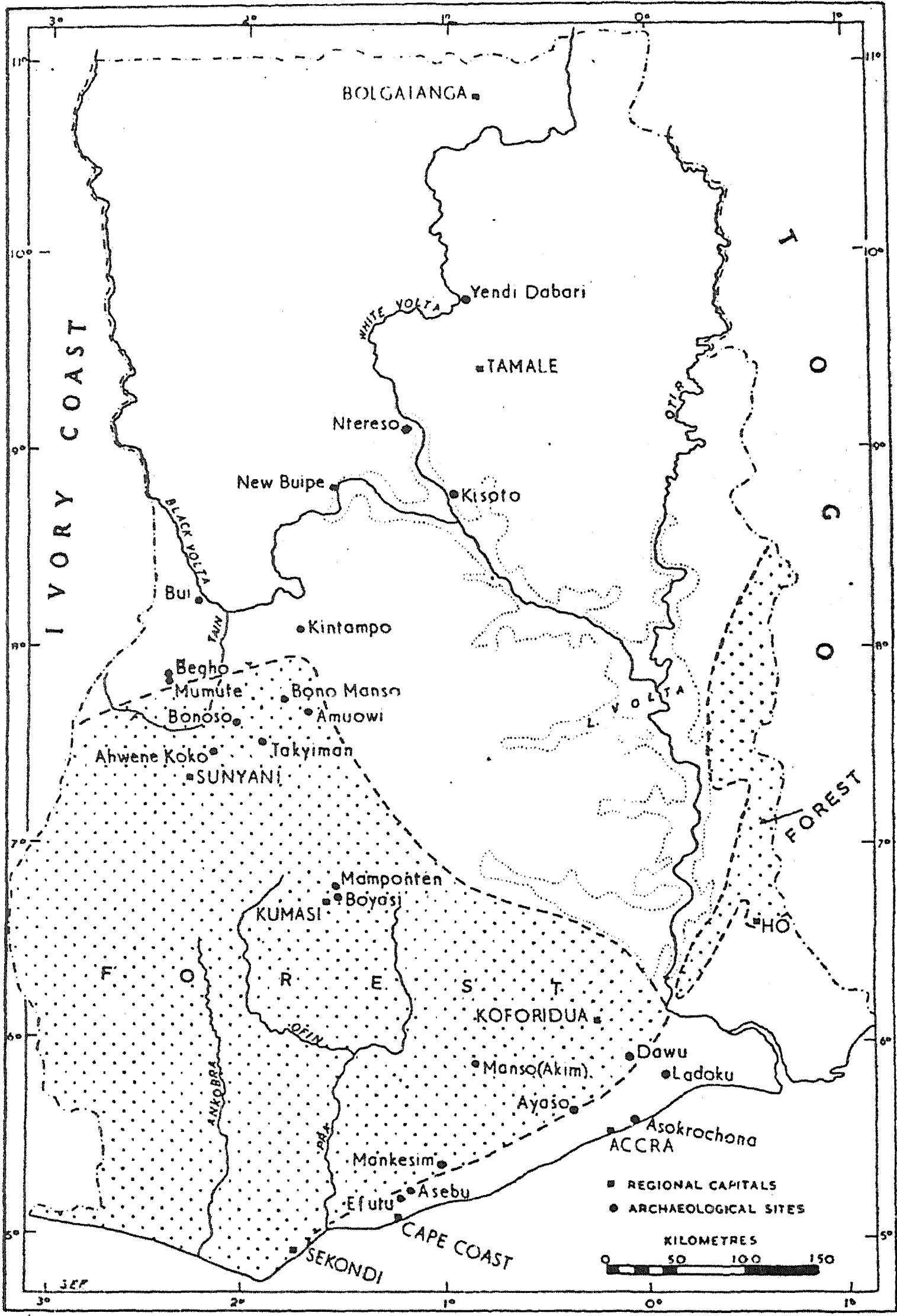


Fig. 3 Main archaeological sites mentioned in the text.

organisation that:

"...although the abusua or clan organisation of the Fante and other Akan peoples was a later development, the organisation based on streets and quarters was not confined to Guan-speakers, but a prominent characteristic of earlier Akan social organisation"

It may be mentioned here that in the oral traditions about Bono Manso the only reference to an ancient quarter at the capital is related to the clan, Dwomoo.

(b) Archaeological Evidence. As in most parts of the country, the Bono Manso area is characterised by the absence of direct evidence for Early Stone Age hunter-gatherer societies. As yet very little is known of Early and Middle Stone Age sites. Only superficial collections of Early and Middle Stone Age artefacts have been made by Davies (1972). In studying the beginnings of any Akan state in Ghana, the period between the Food Producing and Early Iron Age, a period covering roughly between 3,500 and 1,000 years ago, seems to be a crucial one. Unfortunately this is the period with very little or no archaeological information.

The archaeological evidence for this period in the Bono Manso area is associated with what has been termed the Kintampo culture (Davies, 1962; Flight, 1968; Agorsah, 1973; Dombrowski, 1976). This tradition is more common in the Volta bend, just at the northern forest margin of Ghana, though it has also been found at the coast and in the forest (Davies, 1967; Anquandah, 1976). The distribution of the sites related to this culture is strikingly different in the Bono Manso area from that of the Begho area to the north-west (see fig.3). For while in the former area they are mainly restricted to rock-shelters or caves, in the latter area they are mostly open-air sites. From the data available (Flight, 1968; Dombrowski, 1976) this difference may not lie in the ages of the occupation but may be due largely to the physical features of the two areas. While the Begho area is generally without outcrops of sandstone which provide rock-shelters, in the Bono Manso area such outcrops are fairly common. The two areas have produced the same cultural materials including polished stone axes, stone bracelets, grooved stones, 'rasps' (which may be considered the type-artefact of this tradition), and crude, mostly weathered sherds usually

SOME SACRED HOLES AND CAVES ASSOCIATED WITH ARCHAEOLOGICAL REMAINS IN GHANA

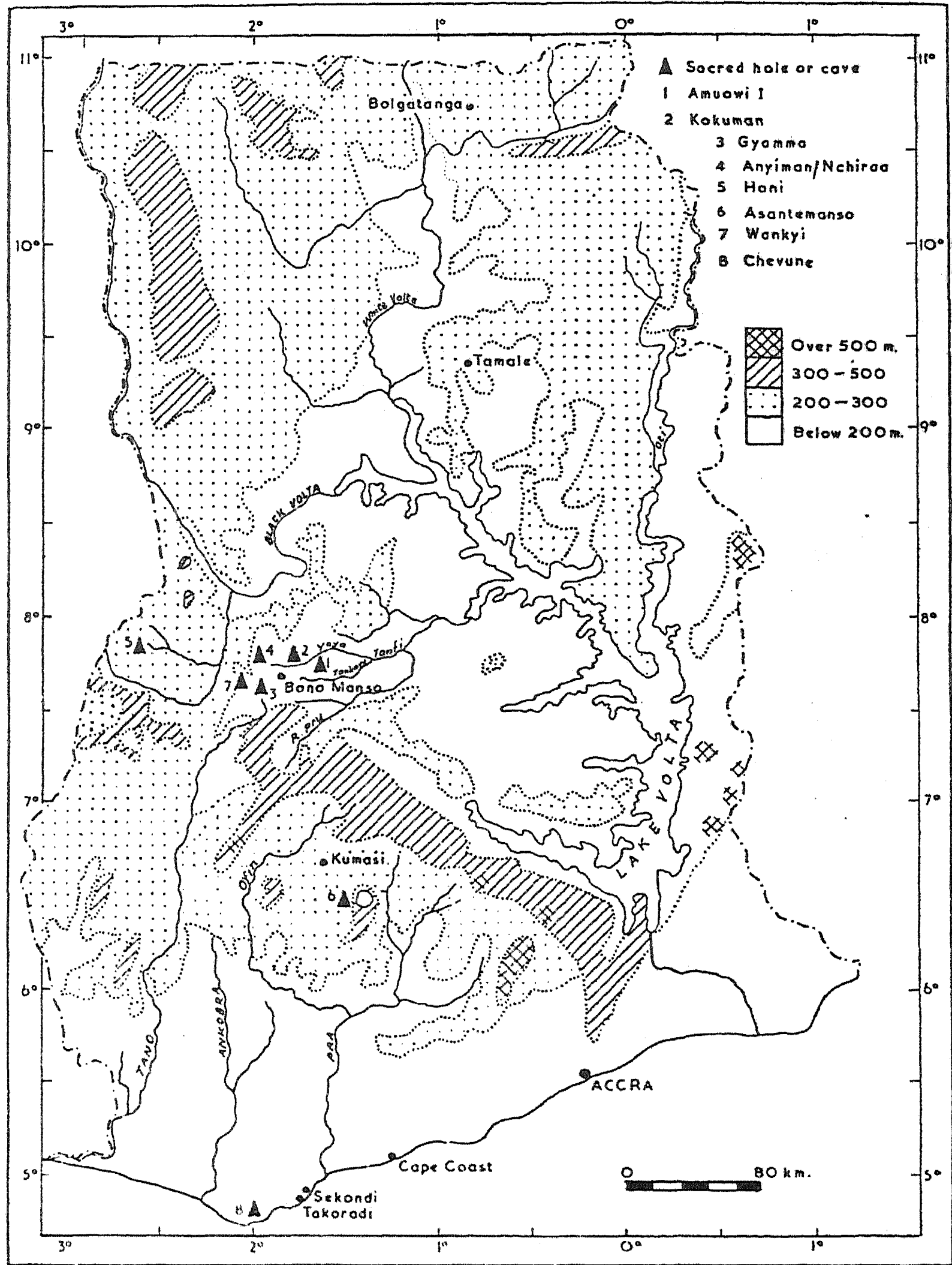


Fig.4

with comb or walking-comb impressed decorations. In the Bono Manso area four or more sites which have produced this tradition are found in the northern part, in the immediate vicinity of Kintampo town which is the type-site of this tradition.

About 18 km south of Bono Manso site is a group of inselbergs and these are held sacred by the present inhabitants of Gyamma who are now located about 3km NNW of Takyiman town, on the Wankyi road (fig.1). The Gyamma elders claim that their earliest ancestors were living on the inselbergs, and surprisingly all the spots mentioned as their sacred sites are associated with tool kits of the Kintampo culture which has been dated elsewhere to between 1500 B.C. and 1100 B.C. (Flight, 1968; Dombrowski, 1976).

Apart from Gyamma, three other rock-shelter sites which are reported to have been used in ancient times by some of the people who formed the Bono state have been located (fig.4). These are Amuowi I ($7^{\circ}39'N$, $1^{\circ}43'W$), Kokuman ($7^{\circ}49'N$, $1^{\circ}44'W$), and Akyiraa/Anyiman ($7^{\circ}53'N$, $1^{\circ}56'W$). Of the three, Amuowi I is claimed as the earliest home of the ancestors of the Takyiman people who founded Bono Manso capital. The antiquity of this sacred site is referred to during the apo festival of the Takyiman people, and during the Yampea drumming ceremony of the Forkuo festival which recounts the deeds and events of Ntoah, an ancient deity of former Dewoman which was a tributary state of Bono (see fig.1) a similar account is given.

An archaeological exploration of this sacred site revealed three adjoining archaeological features close to the sacred hole proper:

- (a) A large rock-shelter about 15m long, up to 2m high and 6m deep. Flowing from an adjoining cave was a stream which had succeeded in eroding pottery from the rock-shelter, a feature which suggested use or habitation of the rock-shelter. This was about 10m north-west of the sacred hole.
- (b) 75m north-west of the sacred hole was a flat rocky area with low grass vegetation. This contained ten grooves of varying dimensions from 4-5cm wide, 8-15cm long, and

2-5cm in depth.

(c) 4m east of the sacred hole flat boulders were found with large quantities of pottery.

Test-excavations at the sacred hole produced 3 grinding stones and pottery. No Kintampo Industrial materials were recovered. The pottery had some features in common with that at the capital site of Bono Manso (see Effah-Gyamfi, 1974). A radiocarbon date for the earliest level in the rock-shelter gave a first millennium A.D. date (N1801 - see Posnansky and McIntosh, 1976).

Traditions of emerging from holes are widespread in Ghana and have been interpreted as claims of autochthonous standing in the areas concerned (Goody, 1965; Bravmann, 1974). Some of these traditions have arisen through either diffusion or political claims to land since the seventeenth century A.D. when territorial rights became more important. Yet there are some of them which may carry direct proofs. Writing in 1923, Rattray made a similar observation about Asantemanso, the sacred hole of the Asante nation (see fig.4), when he said "myths and traditions are strangely substantiated in some respects by visible proofs" (Rattray, 1923:121). This seems to be the case too in the Bono Manso and the neighbouring areas of Wankyi (Boachie-Ansah, 1975; 1978) and Hani (Agorsah, 1973). One may argue that these archaeological associations are coincidental. In the Bono Manso area however, the following reasons seem to outweigh the possibility of chance associations:

- (a) In all the cases visited archaeological objects and features are found close to or on the sites.
- (b) In the case of Amuowi I, the close similarity of the pottery to that from Bono Manso.
- (c) Almost invariably these sites are located in or close to hills which contain caves or rock-shelters with streams flowing from or near them, a condition favourable to Late Stone Age food producing or Early Iron Age societies.

- (d) The people who claim descent from these sacred spots are the very ones who are regarded as the earliest settlers in the Bono Manso area.
- (e) In the case of Amuowi I since A.D. 1723 when the Bono state was conquered by Asante, the area where the site is located no longer belongs to the Takyiman people who claim descent from it. The fact that even though located some 37km away from modern Takyiman yet Amuowi I is consistently mentioned in the Takyiman traditions and ancient songs is an important consideration.

The above reasons would tempt one to speculate that in the case of Bono Manso, these traditions point to a distant past when some of the societies in the area were still living in caves and rock-shelters. This may probably go back to the early food producing or Early Iron Age.

Mention must also be made of an open-air site at Nyinase ($7^{\circ}34'N$, $1^{\circ}45'W$) which the writer discovered. The site had been disturbed by a modern hut built over it. In an area of roughly $50m^2$ were found highly weathered sherds identical to Phase I ware excavated at Bono Manso and found on many of the sites in the area. What is intriguing about this site is that in an area of $15m^2$ was a concentration of these Phase I sherds mixed with stone flakes of similar raw material to those discovered at Gyamma, though none of the characteristic tools of the Kintampo tradition were found. Only one cherty stone seemed to have been utilized, possibly as a sharpener, but whether it was used for sharpening a metal object or a stone implement is difficult to tell. A test-excavation here did not provide any sealed deposit and the finds suggest a factory site.

The present archaeological evidence does not allow us to project the presence of the founders of Bono in the area beyond the first millennium A.D.. For there does not seem to be any definite relationship, at least in terms of pottery, between the Kintampo culture and the earliest pottery from the Bono Manso area. This may suggest that the makers of the Kintampo culture had either left before the Bono people came into the area or they were living in separate areas.

Later Prehistory

One may say that by the first half of the second millennium A.D. the Bono state had been formed. The wealth and power of this early Akan state seemed to have been due to two related factors - the peace and the natural resources of the area.

The Bono state experienced a large measure of political stability from its beginnings till about the late sixteenth century A.D. when there are traditional accounts that the state had a war with the Yabo or Gonja people. Apart from this war, there is virtually no reference to any major war until the early eighteenth century when Asante conquered the state. Such stability would allow free movement of people and economic activities would thrive in a peaceful society. It is true that the traditions make mention of migrations of people from the state (a case in point being the famous tradition of Fante migration). But it may be true to say that many of such migrations which took place in the pre-eighteenth century period did not result from organised wars but through petty squabbles which made families and clans move from their homes. It seems that migrations which occurred in this area have been exaggerated in their political connotation. Indeed there are many statements in the Akan traditions of this country which refer to akokoakoko. This word does not only mean "many wars" as many early writers have interpreted it, but may also mean "petty quarrels and open fights" among families which lead to secession from the parent stock. Thus even if there were internal squabbles and disputes this would not materially affect the general political atmosphere. It must also be added that in terms of political power, the Bono state stood unchallenged in the area until the seventeenth and eighteenth centuries A.D. when powerful states like Dormaa, Berekum, and Nkoransa came into being. Though there were equally early states like Dewoman and Nyafoman, these were not as powerful and each had loyalty to the kings of the Bono state and even belonged to the court of the Bono king. Further south states such as Ohwim, Kaase and Tafo were not as warlike as their successor Asante (Daaku, 1966). Such political stability was indeed a big advantage to the Bono state.

The prosperity of the state lay largely in its location and agro-mineral potential. Situated at the northern edge of the forest, the Bono state enjoyed the advantage of ready utilization of both forest and savanna products. Apart from crops such as rice which is claimed as an ancient crop, yams, sorghum and wild game the area was also very important for a cash crop, kola (Sterculia acuminata). Such a situation would indeed be an asset to the state. For people who travelled from the north and the south would find no problem in getting the type of food to which they were accustomed. Besides, being the southern limit of the savanna, it was a convenient area for traders from the Middle Niger area who normally used donkeys and horses as means of transport. This was because the forest to the south was inimical to the animals they used and so the northern traders would use this area as the last terminus of the famous north-western trade route (Wilks, 1961). The Bono state in addition possessed gold resources which were a vital commodity in the Middle Niger trade. The local population would also use their locational advantage to serve as middlemen for the forest produce from further south.

3. The Eclipse of the Bono State

The wealth and political power enjoyed by the Bono state was however turned into a disaster which led to its eclipse in the first quarter of the eighteenth century A.D.. Traditions from the Bono Manso area are strong in attributing this eclipse to an unexpected invasion by Asante which had become a powerful nation south of the Bono state by the close of the seventeenth century A.D. (Daaku, 1966). Earlier writers such as Reindorf (1895), Ward (1958) and Meyerowitz (1950) have amply narrated the story of Baffo, an Asante warrior who had long been in contact with the Bono king and his wing chiefs. The instant defeat of the Bono state is claimed to have been due to both the treachery and magical powers of Baffo. As has been argued elsewhere, the present writer thinks that on the eve of the invasion the state was virtually poised for a decline largely through the avarice, arrogance and other misdeeds of the king and his 'sons' (Effah-Gyamfi, 1975b, 1976a).

The invasion of the Bono state by Asante may have occurred

between 1722 and 1723 A.D.. For the West India Company letter of 1724 states:

"...then are the Ashantees who have again won a very big battle against a district that lie behind them and was quite 3 times stronger than the Ashantees. It was done thro' treachery, and was at once ruined. Much booty was plundered by the Ashantees much of this they will bring to Elmina to sell which will give a considerable trade" (Furley Coll., 1724 (106)).

This account does not mention the name of Bono, but the description, location and results of the war seem to fit quite well with the oral traditions from the Takyiman area. This date may also be confirmed by the Kitab Ghunja which also states: "1722/23 - In the 35th year Bawo attacked Takyiman; they came and shot at the men of Takyiman and killed them" (Goody, 1954, app.IV).

The king and the queen are said to have been captured in this invasion and sent to Kumasi, the Asante capital. The court craftsmen are also said to have been taken to Kumasi where they continued to manufacture gold and other ornaments for Asante kings. Indeed traditions in the Takyiman area are strong in saying that such traditional crafts as weaving and brass-casting in the Asante area were imported from the Bono state during the war and some crops such as yams are said to have been introduced into Asante from Bono (Reindorf, 1895:104). Finally, well over two-thirds of Bono territory was incorporated into the Nkoransa state with Baffo Pim as the first king. The capital, Bono Manso, became part of the Nkoransa state and so Takyiman, which was then a small village founded by one of the sub-chiefs of the Bono state, became the new capital of old Bono line of rulers. Thus in size, wealth and power the Bono state was considerably reduced. Several attempts to recapture the lost territory were made by later rulers with little or no success. The result of the 1722-3 war has left an indelible mark on every Takyiman citizen and until fairly recently, relationship between Asante and Takyiman was very cold indeed. The same cold attitude has been shown to the Nkoransa people.

CHAPTER IV

SETTLEMENT HISTORY OF THE BONO MANSO AREA

In this chapter an attempt is made to trace the evolution and morphology of settlements in the Bono Manso area. The first section attempts to synthesize the oral traditions collected by the writer on settlement in the area, while the second part attempts to match the archaeological evidence against the oral traditions to find out where the two agree, disagree, or complement each other.

1. Settlement Evolution

It is not easy to explain the reasons for the origins of settlements in this area. Archaeology is in its infancy here and written records are almost totally absent about the Bono state, while oral traditions have, until recently, given more reference to the political evolution of the state than to settlements which 'form a very significant and easily recognisable expression of man's existence on the earth's surface' (Boateng, 1954:16).

Nevertheless, based on the oral traditions, six main categories of settlement may be distinguished and these throw some light on the development of settlements in the Bono state:

- I. Settlements of mythical or uncertain foundations.
- II. Settlements founded by a royal or a chief belonging to the Bono royal court.
- III. Settlements founded through movement of people for better land, due to the discontent in the parent settlement, etc.
- IV. Settlements founded for commercial or agricultural purposes.
- V. Settlements founded by hunters.
- IV. Settlements founded through the advice of deities or oracles.

The table below summarises the settlements in the above categories. It must be pointed out that many of the settlements were founded not by a

single process but by two or more combining. What has been attempted here is to highlight the most important factor in the foundation of each settlement. Admittedly there are many more ancient sites in the area which have not been visited and whose histories have not been collected.

Table 1: Settlement categories in the Bono Manso Area

NAME OF SETTLEMENT	LOCATION	CATEGORY OF ORIGIN	ESTIMATED DATE BASED ON COMPARISON WITH BONO MANSO EXCAVATIONS (see Chapters VII & VIII)	REMARKS
Amuowi I	7°39'N 1°43'W	I	Pre-dating the Bono State	Cave and rock-shelter sites.
Gyamma I	7°37'N 1°57'W			
Nkyiraa I	7°53'N 1°54'W			
Kokuman	7°53'N 1°44'W			
Asekye I	7°37'N 1°44'W	II	13-16th C. A.D.	
Old Takyiman	7°34'N 1°54'W		17-18th C. A.D.	
Dewoman	7°30'N 1°33'W		13-18th C. A.D.	
Amoman	7°46'N 1°53'W		16-18th C. A.D.	
Nkyiraa II	7°53'N 1°54'W		16-17th C. A.D.	
Twema	7°41'N 1°52'W		16-18th C. A.D.	
Tiprama	7°40'N 1°40'W		13-18th C. A.D.	
Amuowi II	7°39'N 1°43'W		17-19th C. A.D.	
Longoro Nkwanta	7°26'N 1°40'W	III	16-17th C. A.D.	
Kagbrema	7°36'N 1°59'W	IV	13-18th C. A.D.	
Kramokrom	7°43'N 1°59'W	IV	13-18th C. A.D.	
Besedan	7°37'N 1°57'W	IV	No reconnaissance yet.	
Nyinase	7°34'N 1°36'W	?	13-15th C. A.D.	No tradition of origin.
Dwomoo	7°35'N 1°53'W	V	13-15th C. A.D.	
Ankomadan	?	V	No reconnaissance yet.	
Tanobuase	7°39'N 1°52'W	VI	16-17th C.A.D.	
Gyamma II	7°36'N 1°57'W		16-17th C. A.D.	

A number of comments may be made from the above table. Settlements in category I are associated with caves and rock-shelters which have been noted as the earliest evidence of settlements in the area. In the case of category II, traditions have it that when the capital was founded, many of the chiefs and royals who served at the court of the Bono kings had founded settlements over which they ruled as chiefs, though they all built houses at the capital where they resided during festivals or other visits. In order that they could be summoned without delay they settled quite close to the capital. Apart from Dewoman which was itself a shrine capital of the Dewoman state, the others were located within about a 15 km radius of the capital. This made it possible for the sub-chiefs to exercise their hierarchical political control over the villages while at the same time ensuring agricultural activities. Close by these chiefly settlements, other smaller settlements could soon spring up so that a wing chief in time would control as many as ten or more villages. For example it is said that one of the earliest sub-chiefs of the Bono state, Takyi Firi, was before his enthronement staying at Nkwakuru (as yet unlocated) but had Baafi and Takyiman as other settlements which he ruled. Settlements in this category thus evolved in a hierarchical order based on the political structure of the Bono state. Their size and population became related to their hierarchical order. Thus for example, apart from the capital of the state, the sub-chiefs had their own provincial capitals which naturally became larger and denser than the other settlements where the sub-chiefs did not reside but which they nevertheless controlled.

There is not much evidence for settlements in category III which involved movement of people from somewhere for better lands or to escape political differences. The settlement at Longoro-Nkwanta which is said to have been inhabited predominantly by Mo people seems the only major example. Though the traditions refer to a political immigration into the Bono state, there is no direct evidence that the new settlers founded their own settlements. Rather they settled among existing villages and towns. For example, it is claimed in both Nkoransa and Takyiman traditions that Baffo (who later became the king of the Nkoransa state) and his people

from Amakom in the forest region stayed among three hunters who had nnan (hunters camps) at the present location of Nkoransa and who were suppliers of meat to the Bono king. (In this case, however, the immigrant population would seem to have been larger than the indigenous population).

Almost inextricably related to category II were settlements in category IV which were occupied by either immigrants or by the indigenous people for commercial gain. With regard to the latter, not much is known except for Besedan which is said to have been founded largely for the exploitation of kola an important commodity needed by the Dyula traders from the Middle Niger area (see Wilks, 1962). In the former case there is at least circumstantial evidence, that Kagbrema and Kramokrom were settled by predominantly alien traders. Even though in the case of Kagbrema traditions are not specific on the question of alien immigration; there is an association of this settlement with an ancient brass bowl claimed to have come from heaven but which is most probably a north African trade item. Moreover the non-Akan name it possesses and the cross-reference of Goody's Gberi (which may equally be Kagbrema) who are said to have been staying in the Takyiman area but whose descendants are now in the Bole area, may indicate an alien commercial settlement (Goody, 1964:196; Effah-Gyamfi, 1975b:225). On the other hand, Kramokrom is specifically mentioned as an alien settlement, and in fact its name is self-explanatory: Kramo is the Akan word for 'Muslim'; Krom is an Akan word for 'settlement'; thus Kramokrom means 'Muslim settlement'. Traditions are unanimous in claiming that even though these alien traders were Muslims, their religious impact was not very strong in the Bono state. Though they despised the local religion, it is said that the Muslims did not or could not effect any change. To make sure however, that their religion was not polluted, these Muslim traders are said to have stayed clear of the capital town and usually had a predominantly Muslim settlement from where they could not only trade with the local people but also worship Allah in peace. Kramokrom was thus located about 4 km to the west of the capital.

Settlements under category V were initially hunters' camps. As a result either of availability of game or good agricultural land around, these camps attracted people, initially from the parent settlement of the hunter and later from other settlements (Kwamina-Poh, 1973, app.1). Most

of these settlements were closely related to sub-chiefs in the Bono state.

Settlements which were founded by prophecies of deities were not many in the Bono state, but were no doubt very important since the traditions give prominence to the important role of deities in Bono culture. It seems however that it was mainly when there was a calamity such as an epidemic that deities were consulted about the fate of the settlement concerned. When the calamity was unbearable the deity would instruct a mass shift to another place. In some cases however, the deity would instruct a new settlement to be built.

It seems to the writer that though the Bono state experienced a considerable influx of immigrants, the expansion of the territory was not so much by military conquest, as by a process which largely involved the indigenous people's social, religious, economic and political structure. What is so far not clear in the oral traditions of the area is the process of political integration of the Bono state. Judging from the accounts about the various chiefdoms in the state, it would appear that until the foundation of the capital town, Bono Manso, each chiefdom was virtually independent. The force behind the integration would seem to have centred on a powerful and diplomatic political ruler, and King Asaman, the putative first ruler of the Bono state, is said to have possessed these very qualities. Perhaps it is this process that explains why even though some of the rulers of the chiefdoms did not have blood relations with the Bono kings, they were nevertheless referred to as "sons" of the king and they performed key social and political functions at the court of the Bono King.

2. Settlement Hierarchy:

The above factors resulted in four main levels of settlement in the Bono state. The dominant town had a designation which made it impossible for other towns to use the same name: Manso is from two words - Man (state), so (on or seat of); thus (Bono) Manso refers to the seat or capital of the state. That the town was preeminent in the state is also supported by the assertion in the traditions that it was the only one 'with 177 streets' probably a poetic expression to show its dominating size in

the whole state. The above observations are also apparent from other Akan capitals: Abankesieso, capital of Denkyira state; and Asantemanso, capital of Asante state, had 77 streets (Rattray, 1929:61).

Bono Manso was the seat of the state and thus the town where the king resided. It must be pointed out however that even though in the Bono Manso area the word Ahenkuro (seat of the king) is used when explaining the status of the capital of a state, the word was not used to designate any town (but see Dickson, 1970:41). All the sub-chiefs, as noted above, also had their houses there even though many of them did not reside permanently at the capital. Apart from its political dominance it was also the centre of commercial, economic and religious activities. Every attempt was made to maintain the capital. For example, traditions from the atomfoo (blacksmiths) quarter at Takyiman say that the number of atomfoo in the ancient town of Nyafoman was high and therefore one hundred and fifty of the atomfoo were drafted into the court of the king at Manso to provide tools for the people at the capital.

Down the ladder were settlements which were the provincial capitals of the chiefdoms ruled by the sub-chiefs of the Bono state. Though not invariably, these settlements were prefixed by the name of the founder and then suffixed by the word man (state). Thus for example the name Takyiman was acquired by two words - Takyi (the name of the founder) and man (state); hence Takyiman (Takyi's state or town). It will be noticed here that man is used in two senses: one to refer to a chiefdom and then in the other sense to the capital of that chiefdom. Under this level of settlements were Takyiman, Amoman, Nyafoman and Dewoman. That they were next in importance to the state capital is born out by the assertion that they each had '77 streets'. Even though a few of the settlements are claimed in oral traditions to have had the 'poetic' 77 streets (e.g. Amuowi II, Asekye I and Tiprama) and were ruled by royals or sub-chiefs of the Bono state, they did not possess the characteristic designation. It appears therefore that apart from the usual designation there were other equally large towns which would belong to the same category in terms of size and function.

Below this level were settlements which were controlled by a royal or sub-chief but none of which was the residence of the sub-chief concerned. Here again, although not in all cases, they had a distinctive designation, that is, they were invariably prefixed by the founder or the main activity associated with the town and su-fixed by Krom (town). The following settlements would fall under this category: Kramokrom, Forikrom and Ameyawkrom (the last has not yet been visited). It is important to remember that this is the category which has the Akan designation of kuro (town). In the Bono concept of settlement categorization therefore, it would appear that the word kuro (town) was used to refer to a settlement below the state and provincial capitals.

Next were a host of settlements without any specific designation but which were referred to as nkuraa (villages; akuraa singular). These included: Akubiase, Akrumantia, Akyemhatae, Akyremade, Asrakankan, Besedan, Boagyadu, Dadiase, Dapafo, Gyamma II, Kagbrema, Longoro-Nkwanta, Nyiraa II, Tanobuase, and Twema. Some of these villages were deliberately founded to perform a special activity for either the king of the Bono state or a provincial chief. For example, Akyemhatae was the village founded by the caretakers of the gold wealth and the shields of the Bono king. Besedan was said to have been the Bono queen-mother's village where her kola plantation was located. And Akyremade is said to have been inhabited by the drummers of Dewoman, a chiefdom within the Bono state.

3. Archaeology and the Settlement History of the Bono Manso area

So far over 30 settlement sites have been reported in the oral traditions concerning the Bono state. Not all of them have been visited owing to time and money. Twelve settlement sites have however been visited. Surface pottery has been collected from almost all the twelve sites visited. These have been compared with those from Bono Manso where a much more detailed analysis of the pottery sequence has been made. On the basis of this comparison the sites have been tentatively assigned to the corresponding phases of occupation recognised in the Bono Manso excavations which will be dealt with in more detail in subsequent chapters. Table 2 below summarises this settlement history.

Table 2: Chronology of Settlements in the Bono Manso Area

NAME OF SITE	LOCATION	COMPARABLE PHASE OF OCCUPATION WITH BONO MANSO	ESTIMATED DATE OF SETTLEMENT BASED ON BONO MANSO EVIDENCE
X Akyemhatae	7°32'N 1°56'W		
X Amuowi II	7°39'N 1°43'W		
X Kagbrema	7°36'N 1°59'W		
X Kramokrom	7°43'N 1°52'W	Phase III	1600-1750 A.D.
+ Old Takyiman	7°34'N 1°54'W		
X Tiprama	7°40'N 1°49'W		
X Twema	7°41'N 1°52'W		
Longoro Nkwanta	7°26'N 1°40'W		
* Nkyiraa II	7°53'N 1°54'W	Phase II	1450-1600 A.D.
* Tanobuase	7°39'N 1°52'W		
X Tiprama	7°40'N 1°49'W		
+ Asekye I	7°37'N 1°44'W		
X Kagbrema	7°36'N 1°59'W		
X Kramokrom	7°43'N 1°52'W	Phase I	1250-1450 A.D.
+ Nyinase	7°34'N 1°36'W		
+ Dwommo	7°35'N 1°53'W		

KEY: X = Site with two or more phases of occupation.

* = Site whose surface pottery was not collected by the writer (see Anquandah, 1965).

+ = Single occupation site.

It was decided to survey some of the sites in each of the categories mentioned above. A controlled stratified sampling did not succeed because over 80 per cent of the settlement sites mentioned in this chapter are in extremely difficult areas where a controlled survey was very difficult, if not impossible. Moreover this attempt was made early in the project, at a time when public confidence was extremely low and people considered the writer and his team as surveying the sites for political reasons (Bono Manso survey for instance, was interrupted because of the fear of the inhabitants that it would result in the land being taken from Nkoransa control). The sites surveyed seem to be a representative sample of the settlement hierarchy described above. The following sites were surveyed:

<u>Site Name</u>	<u>Category of Settlement</u>	<u>Bono/Akan Designation</u>	<u>English Equivalent</u>
Bono Manso	Grade I Site	<u>Kuro Kese/Ahen-Kuro</u>	Very large town/capital town
Amuowi II) Old Takyiman)	Grade II Site	<u>Ahenkuro</u>	provincial capital/ large town
Dwamti	Grade III Site	<u>Kuro</u>	town
Kagbrema) Twema)	Grade IV Site	<u>Akuraa</u>	village

The survey was based largely on the combination of three or more of the following: collapsed houses in the form of mounds, pottery scatter, baobab trees (Adansonia digitata) which are usually a common feature of abandoned settlements in the savanna areas, features and objects shown by local guides, and other clues such as the nature of the vegetation and road cuttings through a site.

Table 3: Approximate sizes of selected sites in the Bono Manso Area

SETTLEMENT NAME	SETTLEMENT GRADE	SIZE OF SITE	REMARKS
Bono Manso	I	2.3 sq.km	A triple-phase site
Amuowi II)	II	1.64 sq.km	A double-phase site
Old Takyiman)		0.85 sq.km	A single-phase site
Dwamti	III	0.42 sq.km	A double-phase site
Kagbrema)	IV	0.22 sq.km	A double-phase site
Twema (mmakro)		0.26 sq.km	A double-phase site

It will be noticed from the above that there is a considerable archaeological match with the traditional categories. One should not expect a neat correlation since in this study it was impossible to know the exact limits of every settlement. And in the case of Kagbrema, a double-phase site may overlap and tend "to expand" the area of pottery scatter especially where the second occupation overlaps the earlier one, while a single occupation site may be more easily demarcated.

From the traditional and archaeological evidence therefore, it appears that the Bono (and perhaps Akan generally) had a distinctive way of conceptualizing their settlements as did the Yoruba (Ojo, 1966). It appears that the Bono conceived of an urban centre largely as the seat of the king, the largest and most densely populated of all the settlements ruled by the king of the Bono state and also the centre of economic, social and religious activities. Almost all communications in the area were said to have been focussed there (see fig.1). All the sub-chiefs made regular contacts with the king and every attempt was made to maintain the vigour of the centre. But this did not mean that it was isolated from the surrounding areas. Moreover, as with other West African states, the urban centre would not necessarily be ethnically heterogeneous but a largely homogeneous society.

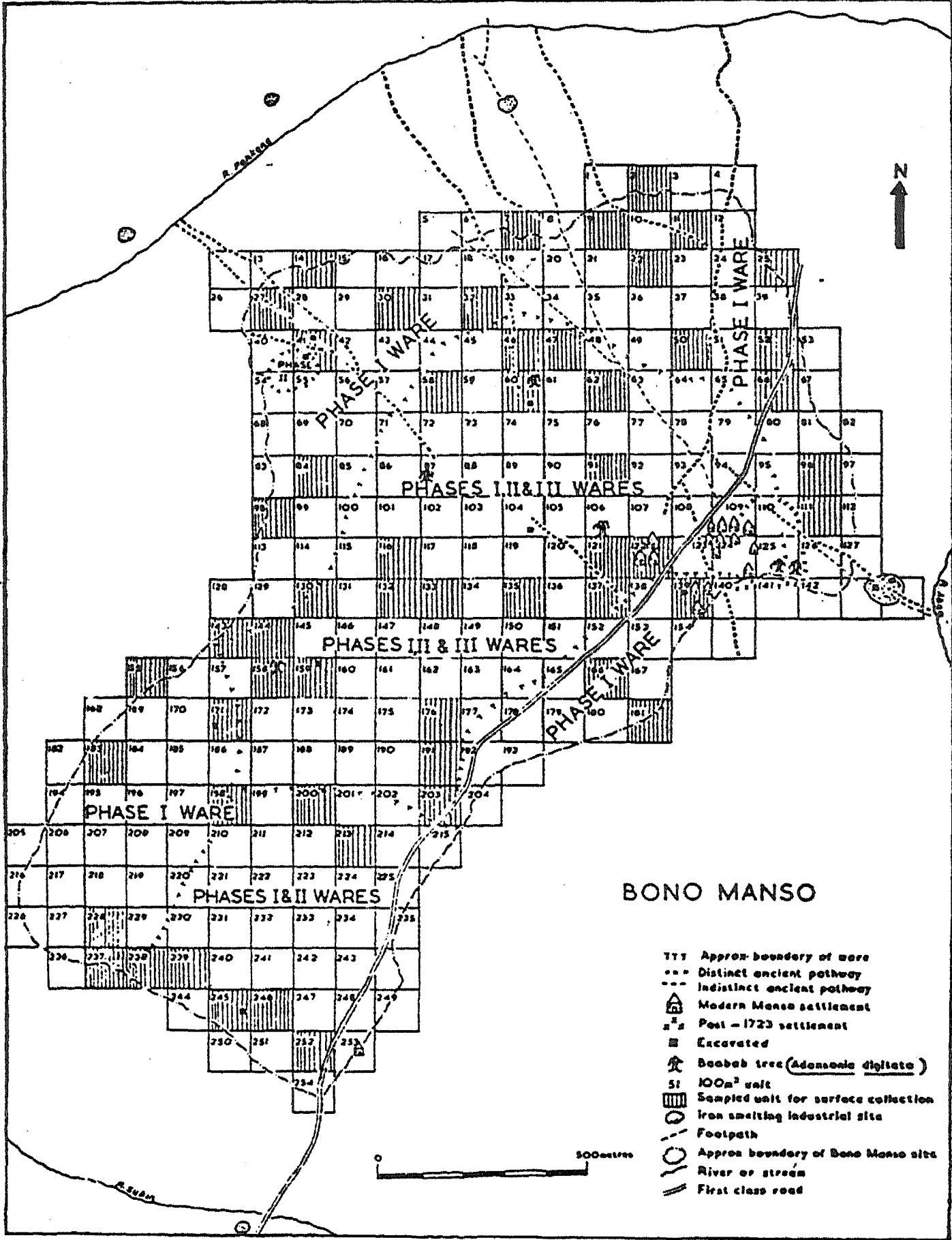


Fig. 5 Approximate size of Bono Manso site.

CHAPTER V

FIELD SURVEY AND EXCAVATIONS AT BONO MANSO.

This chapter is divided into two sections. The first section deals with the field archaeology at the Bono Manso site. The main surface features are here described and an attempt has been made to explain them in relation to the development of the capital. The second section describes the nature and features of the excavations carried out at the site.

Section A: Field Survey.

On the basis of the criteria mentioned in the earlier chapter, an area of roughly 2.3 km^2 was demarcated as representing the approximate size of Bono Manso (Fig.5). This study was made in December 1973 when the dry season was at its peak and the area had been burnt by bush-fire. During the same season in 1976 a more detailed study was made of the site. This involved gridding the site, whose borders were then known, in 100-metre squares. By means of random sampling 55 out of about 250 squares were selected for the collection of pottery. This was done largely by students who had been detailed to collect all pottery from an area of 5 m^2 at 10 m intervals. Although this was rigorously undertaken sometimes the bush and thickets which confronted us were such that a patch would be missed. In addition a unit might fall within a disturbed area or tract of unburnt bush. This latter problem was circumvented by re-sampling when a new unit was chosen. There was no immediate solution to the problem of thicket and one had to be content with what was available, though only four of such patches occurred (squares 239, 183, 96 and 11 - fig.5). Each square was given a separate number and its pottery bagged separately.

Attention was also paid during this collection to features at the site. And from such observations and the analysis of the surface pottery from the squares, two interesting results emerged. The first is that the site has two main types of house mounds: high and low mounds (Plates I and II respectively). The high mounds are mostly

dome-shaped and appear as semi-circular or roughly rectilinear forms with a central depression where pottery is often scarce. These mounds are extensive, averaging 30 m (though the perimeter is not clear-cut) and 2.5 m high. The low mounds are roughly cone-shaped. These do not contain any central depression as the high ones. They average 10 m across and 1 m high.

An intermediate type of mound is low, and is either rectilinear or semi-circular in form, still averaging 1 m high but more extensive. The mounds average 15 m across and have very shallow central depressions quite unlike the high mounds.

The low mounds are associated with low density pottery which is almost invariably coarsely finished, sand-textured with poorly executed grooves or incisions as the main decorations. The high and extensive mounds are, on the other hand, covered with a high density of pottery which is of two main groups: sherds highly burnished with glittering flakes of mica and with almost invariably beautiful wavy or curvilinear grooves; and some dull, well-burnished sherds with roulette decorations. In the 1973 excavation the low-mound ceramic type was found at the earliest level while the two other ceramic types were in the upper levels, indicating that the low mounds represent the earliest occupation at the site. In the subsequent excavations it has been discovered that the two other groups of pottery each has a distinct occupation unit: the dull, well-burnished sherds with roulette decorations are concentrated in the middle occupation while the micaceous pottery was concentrated in the upper occupation. The middle occupation pottery merges imperceptibly with the upper occupation one. In fact these three groups of pottery, each being most popular in a particular phase of occupation, have been particularly useful in putting the sites in this area into chronological order as has been shown in the earlier chapter.

The second observation is that the low mounds have a different vegetation from the high mounds. While the former has low grass locally called sere (Imperata cylindrica) the high mounds are in most cases covered with tall elephant grass locally called hwedee (Pennisetum purpurem) especially

where not much cultivation has taken place. Based on the radiocarbon dates from Bono Manso and other related sites, it has been discovered that it is only the sites which are earlier than 1500 A.D. which possess the sere while the hwedee is associated with the mounds which have deposits spanning 1600 A.D. to 1800 A.D.. Whether this observation will be a valuable chronological tool for archaeological sites in the savanna grasslands of Ghana remains to be proved by an analysis of soil samples. However analysis of soil samples by Hall and Lock at Hani (site of ancient Begho) suggests that the nitrate and phosphate levels at the site of Dwinfour (artisan) quarter, where tall elephant grass grows, was higher than the uninhabited areas around. This has been explained by the fact that at the site accumulation of earth from collapsed buildings and village waste has led to an improvement of soil fertility (Hall, pers. comm.). It is important to note that at this site too, the available evidence suggests a date between 1450 and 1750 A.D. (Crossland, 1976a). Moreover Hall and Lock noticed the complete absence of the tall elephant grass at the Checkru stream where early food producing materials have been discovered (Dombrowski, 1976; Hall, pers. comm.). It would therefore seem that there is a close relationship between soil fertility and age of settlement in this area.

Another important observation is the remarkably close distribution of baobab trees (Adansonia digitata) with the high mound areas. In many parts of Ghana, particularly the savanna areas, this tree has been a very valuable settlement indicator. It is a useful tree whose fruits can be used for food (Owen, 1974). Unfortunately in West Africa it has not been used for dating (but see Swart, 1963). At Bono Manso the areas dating up to the sixteenth century A.D. are strikingly devoid of baobabs while they are relatively common with the mounds which have occupation deposits in the upper levels dating between the seventeenth and eighteenth centuries A.D. (see fig.5). Such a chronological correlation has also been confirmed with sites in this area where the surface (and in a few cases excavated) finds clearly indicate that they fall within the same period or are later. This observation may also be true of some sites excavated in other parts of Ghana: Yendi Dabari, Ayaso and Ahwene Koko whose dates

generally fall within the last 300 or 400 years ago (Shinnie and Ozanne, 1962; Ozanne, 1962; Boachie-Ansah, pers. comm.). Tables 4 and 5 below illustrate this frequency of occurrence:

Table 4: Settlement sites with Baobabs (*Adansonia digitata*) in the Bono Manso area.

NAME OF SITE	ASSIGNED PHASE BASED ON BONO MANSO POTTERY SEQUENCE	ESTIMATED DATE BASED ON BONO MANSO DATES (see Chapter VIII)	NO. OF BAOBABS LOCATED	REMARKS
Amuowi II	Phase II/III	1610±80 (N1802) for lower levels upper levels dating 18th/ 19th century A.D.	9	Excavated 1973
Longoro Nkwanta	Phase II	16-17th century A.D.	2	
Old Takyiman	Phase III	17-18th century A.D.	4	Excavated 1976
Dewoman	Phase II	16-17th century A.D.	1	
Asekye II	-	c.19th century A.D.	2	Postdates Bono Manso site
Tanobuase	Phase II	16-17th century A.D.	2	
Kramokrom	Phase I/II	c.13-17th century A.D.	1	
Bono Manso	Phase III	c.17-18th century A.D.	6	See fig.5
Twema	Phase II/III	16-18th century A.D.	1	Thicket

Table 5: Settlement sites without Baobabs in the Bono Manso area.

NAME OF SITE	ASSIGNED PHASE BASED ON BONO MANSO POTTERY SEQUENCE	ESTIMATED DATE BASED ON BONO MANSO DATES (see Chapter VIII)	REMARKS
Asekye I	Phase I	c.13-16th century A.D.	-
Kagbrema	Phase I	c.13-16th century A.D.	Phase III pottery in parts
Nyinase	Phase I	c.13-16th century A.D.	-
Gyamma II	Phase III	17-18th century A.D.	Thicket
Bono Manso	Phase I	13-16th century A.D.	-

As yet the writer is not aware of any work on this tree in Ghana. It would be useful to know the life-span of Adansonia digitata in the West African savanna; also whether it was imported to West Africa and when. The work done so far seems to suggest that the presence of baobabs at Savanna single period sites in Ghana may indicate settlements whose age may not go beyond 1550 A.D. at the earliest, though baobabs have been estimated to last over 4,000 years in some parts of Africa (see Livingstone, 1865; Guy, 1967; Swart, 1963). Although not present at pre-1500 sites in the area, the writer does not claim that baobabs were introduced or domesticated later.

Three important observations could be made in relation to water resource utilization. The first was that Bono Manso was almost surrounded by streams or rivers (fig.5). To the north and west it was bordered by the Pankana stream; to the south by the Subin river and to the east by the

Abam stream. Indeed the need to be near as many water resources as possible is emphasized in the traditions about the founding of the capital: hunters of the putative first king, Asaman, are said to have surveyed far and wide. In the end it was considered that the site which became the capital was the most suitable owing to the fact that the water resources were good.

An interesting feature of the site is the presence of iron-smelting sites at about 300 metres from the outskirts. So far five such sites have been discovered. One of these was excavated in 1976 and will be described more fully later in this chapter. The slag mounds at each site are less than 1 m high but they are extensive, spreading from between 20 to 30 metres across. Apart from deposits of slag and tuyere fragments, no other surface finds were discovered. Van Landewijk has observed that water was an essential item in the traditional smelting of iron, particularly in the cooling process. Water would thus be an important determinant in the location of ancient traditional iron-smelting factories.

Traditions make constant mention of the use of aponko (horses) by the king and the royals. The sub-chiefs were said to have each owned a horse which enabled them to frequent the capital for consultations. The present elders of Asekye, Tanobuase, Takyiman and Amoman are able to guide visitors to sections of these pathways used in ancient times to connect the capital. And the common traditional saying: hyia ponko a nni agyinase ("if you meet the horse there is nowhere for you to stand") indicates the inconsideration which the royal riders are said to have shown in the area. The use of horses was said to be the prerogative of the kings, royals and sub-chiefs only.

At Bono Manso three of these pathways were traced with the help of local guides in 1973. Since then many more have been traced (fig.5, Plate III). These pathways vary in size, and some are less distinct than others and one needs some amount of experience to be able to follow the indistinct ones. What is remarkable is the fact that almost all the pathways at the capital end abruptly at the streams to the north and east of the capital; as yet no pathway has been found leading to the Subin river to the south. Such

a distribution is curious. An ethnographic study of the water-fetching habits of the people of modern Manso village was made and it was found that there is a general preference for spring water from the streams to running water from rivers. Traditions also have it that it was a taboo for the king to drink water from the Subin river. The former observation and the latter account seem to suggest that the Subin river did not feature prominently in water resource utilization in ancient Bono Manso. And as will be shown more fully below, these pathways would not only serve horses (if at all there were horses) but they would also be used by the human inhabitants, particularly women and children, in fetching water from the nearby streams. Another interesting aspect of these ancient pathways is that they are generally deeper and more distinct at the outskirts than on the site proper, apparently because the latter section has been more silted up by collapsed houses than the former which did not form part of the built-up area. A section of one of these pathways was excavated and will be described below.

It would be seen from the above observations that the morphology of the capital site was closely related to the natural environment, particularly water resources. A look at fig. 5 shows that the town must have expanded in relation to the location of the nearby streams which bordered it. Indeed even though isolated potsherds have been found beyond the streams, no settlement site has been recognized within 1 km distance beyond the streams which bordered the town. Such a situation meant that if the population increased greatly there would be very little room for expansion and the most likely solution would be for families to opt out either to found new settlements or to join the inhabitants of other settlements. Such a situation could only have occurred in the earliest phase of the town's development since as fig. 5 shows the distribution of the earliest ware closely follows the boundaries of the site, while the later wares are concentrated in the middle of it.

This observation runs contrary to modern analogies where towns expand outwards rather than inwards, and an explanation must be sought. Perhaps this anomalous nature of town growth may be related to the size

of population and the political organisation at the capital. During the survey of the site, four 100 m^2 units, two each of high and low mounds respectively which were least disturbed by human activity, were selected for mound count and measurements (squares 116, 135 for high mounds; 183 and 198 for low mounds, see fig.5). This attempt was not without difficulties. Even though the most distinctive trait of the high mounds is their rectilinear shape with a central depression, some of them have less distinct shapes and in some cases the characteristic central depressions are non-existent. Moreover the distances between two or more high mounds are difficult to determine since many of them do not provide any distinct spaces between them. The low mounds are easier to detect, each having only one summit. One must also say that erosion must have affected these types of mounds so that some of them may have disappeared. For these reasons it is difficult, if not impossible, to know the exact number of mounds at the site.

Ethnographic studies of recently collapsed swish houses in the Bono Manso area by the writer shows that the high mound depressions may represent the courtyards of either rectangular or L-shaped buildings, the latter mostly representing the average man's house while the former represents a rich man's house. The L-shape is usually the result of the financial difficulty of the owner in completing an originally designed rectangular house. With time, the L-shaped one would be developed into its original rectangular form.

Taking the mounds surrounding depressions at the site as the most probable house indicators of the central part of the site, the writer made an average count of nine distinct mounds over an area of $10,000\text{ m}^2$. An average of 12 metres was obtained after measuring the distances between one house mound and another.

Ethnographic parallels for collapsed houses with shapes similar to the low house mounds have not been found in the Bono Manso area. However a brief study of some of the surviving wattle and daub structures in the area shows that though the rooms are rectangular, the house plans are not continuous but separate, L-shaped, sometimes irregular three or four

roomed structures joined together by a fence, the central part being essentially the courtyard and kitchen. If such a house were to collapse, discrete low mounds would result with a central depression. This suggests that the surviving wattle and daub houses differ significantly in plan from the houses represented by the low mounds. However if one considers that population was lower in ancient times than today, it is reasonable to suggest that single-roomed houses would have been more common in ancient times. If such single-room houses were to collapse, they would most probably be low mounds with imperceptible central court-yards, especially if they were single occupation houses. This latter observation might have been the case with the houses represented by low mounds at Bono Manso, though one should not discount the possibility that they represent round, single-room houses too.

Using only the summits of the low mounds as the main criterion, four mounds on the average were counted over an area of $10,000 \text{ m}^2$. The distances between the mounds were, unlike the high ones, very wide, being 30 m on the average.

This attempt suggests that in the early phase of the town's growth houses were small, perhaps flimsy and the settlement was not compact, whereas in the later period larger and more compact houses were built and the town assumed a more nucleated pattern. This change in morphology would not only have resulted from population increase, but it is also possible that the earlier, formative period was marked by a loose political organisation in which, though there was the overall head of the town, the inhabitants would have been more attached to their families; and then by the later period a more central authority had evolved in the personality of a king whose precincts would have become a centripetal force in the settlement, a phenomenon which may also have been made possible by the commercial hegemony of the town over the surrounding settlements.

Section B: Excavations

Introduction:

After the reconnaissance and analysis of the surface pottery from Bono Manso, the writer was faced with the problem of choice of areas to be excavated which would enable some measure of general information to be obtained. The reconnaissance and surface collection had revealed four types of features which required investigation:

1. High mound areas.
2. Low mound areas.
3. Pathways associated with horses.
4. Iron-smelting sites.

The first two may represent the built-up areas of the capital. As has already been discussed, the preliminary excavation in 1973 and subsequent surface collection revealed that these two types of mound had temporal relationships. Forming over 95 per cent of the surface area at the site, it was considered vital to test more of these mounds than of the last two. It was decided to sink test pits in most cases, but at the same time carry out one areal excavation for each type of mound; the size of each areal excavation was limited to not more than half of the mound concerned.

Random and stratified sampling methods were employed in the case of unit areas where surface collection had been conducted. The sampled areas were either of low mounds or high mounds. These mounds were again sampled and one of them chosen to be excavated. Each area chosen was given an abbreviation for the name of the capital (BM) and the number of square unit, and year of excavation. In the case of the iron-smelting factory sites which were all at the outskirts of the town, the name of the stream near which the site was located replaced the square or sample unit number. The table below shows the list of areas excavated at Bono Manso between 1973 and 1976:

Table 6: Areas Excavated at Bono Manso, 1973-1976 (see also fig.5).

AREA EXCAVATED	NATURE OF SITE	DATE OF EXCAVATION	NATURE OF EXCAVATION	REMARKS
1. BM 104	High mound	August 1973	Trench 1.5 x 15 m	Not sampled
2. BM 60	High mound	January 1976	One 3m ² ; one 1m ² test pits	-
3. BM 159	High mound	August 1976	Areal excavation	-
4. BM 139	Low mound	January 1976	Areal excavation	-
5. BM 171	Low mound	January 1976	1.5m ² test pit	-
6. BM 245	Low mound	January 1976	Two 1.5m ² test pits	-
7. BM 41	Ditch or path	August 1976	Trench, 1.5 x 12m	Aponkowan (horses' pathway)
8. Abam iron-smelting site	2 low slag mounds	July 1976	2 trenches 1.5 x 6 m each of a mound	-

(The sampling employed above was done after the 1973 preliminary excavation. Therefore Area 104 - originally called BM 1/73, see Effah-Gyamfi (1974-1977), was not among the controlled sampled units. It has however been included here since it is intended to consider together all the areas excavated at Bono Manso).

In all cases an area to be excavated was first cleared to expose not only the mound but also a considerable space around, which would help reveal the configuration of the mound, and provide space for spoil heaps to be deposited. The whole area cleared was gridded into 3 m units and was then surveyed.

As already pointed out, the site of Bono Manso is heavily cultivated particularly with cotton, yams, groundnuts and cassava. Since largely unskilled hands were employed in 1973, that excavation was conducted in arbitrary levels of 15 cm each. After this the materials from the various levels were lumped into separate layers which were revealed distinctly in section. This created a problem, for some levels cut across layer boundaries, though this was on a small scale. The experience gained from this was valuable, and in the subsequent excavations this problem was borne in mind. Happily by this time the labourers who had been with us in 1973 were sufficiently experienced to recognise the different soils. In addition students who had at least been given theoretical training and two experienced field assistants participated. All the other areas excavated were therefore excavated in true archaeological layers.

1. EXCAVATION OF HIGH MOUNDS (AREAS 104, 60 AND 159)

a) Nature of Mound and Stratigraphy

Mounds in this category are extensive, covering not less than 30 m across in each case and not lower than 2.5 metres high. Each mound usually has two main summits at right angles to each other with an enclosed depression which, as suggested above, may represent the open courtyard of a house. These mounds vary in depth but they usually reveal about 1.50 m of cultural deposit before the sub-soil is reached.

The mounds seem to represent an accumulation of debris of two or more houses built successively at one place, though as will be shown in the case of Area 159, there were considerable shifts in the actual location. Nevertheless these shifts seem to have revolved round the courtyard which would remain more or less constant (see also McIntosh, 1975, 1976).

Although the stratigraphies of the high mounds differ in detail

there is a remarkable similarity in the five major layers recognised from each of the mounds: Layer I is usually a humus soil; below it is Layer II, a loose dark brown soil with grass rootlets (this layer was absent in the stratigraphy of the mound excavated in Area 104, see fig. 8). Below this is Layer III, a thick grey layer with ash, charcoal and daub flecks. Layer IV is a dark brown, compact soil with charcoal lenses, and this gives way to Layer V which is the natural sub-soil, a sticky, red clay without any cultural materials. The stratigraphies do not suggest any abandonment and re-occupation. This observation, coupled with the gradual development and variations in the cultural materials, particularly pottery, seem to suggest a single continuous occupation which was nevertheless in phases. Three such phases have been distinguished, each of which is characterised by a distinct ware. There is also a general correlation between the main layers described above and the frequency of the three main wares, though minor differences occur in individual mounds. In the earliest cultural layer (layer IV) sand-textured sherds with poorly finished surfaces are predominant (see fig. 6). This layer may represent the earliest phase of occupation and for this reason the predominant ware has been designated Phase I or Early Phase ware. In the thick grey layer (layer III) dark brown sherds with roulette decorations and which are usually very well burnished predominate. This layer seems, from all indications, to represent the second phase of occupation. Therefore the ware most frequent here has been designated Phase II or Middle Phase ware. Layers I and II seem to correspond with the third phase of occupation and here there is a sudden increase of sherds with mica flakes which are usually decorated with grooved motifs. This ware is designated Phase III or Late Phase ware.

It must be pointed out that none of these distinctive pottery wares were found exclusively in each phase of occupation (see fig. 6). Indeed there were other ceramic types which will be discussed more fully in chapter VII, though these were not as frequent as those described above. Nor must it imply that each of the three wares started and ended abruptly. As fig. 6 shows clearly there was, for example, almost always a side-by-side occurrence of Phase I and II wares in the middle phase of occupation,

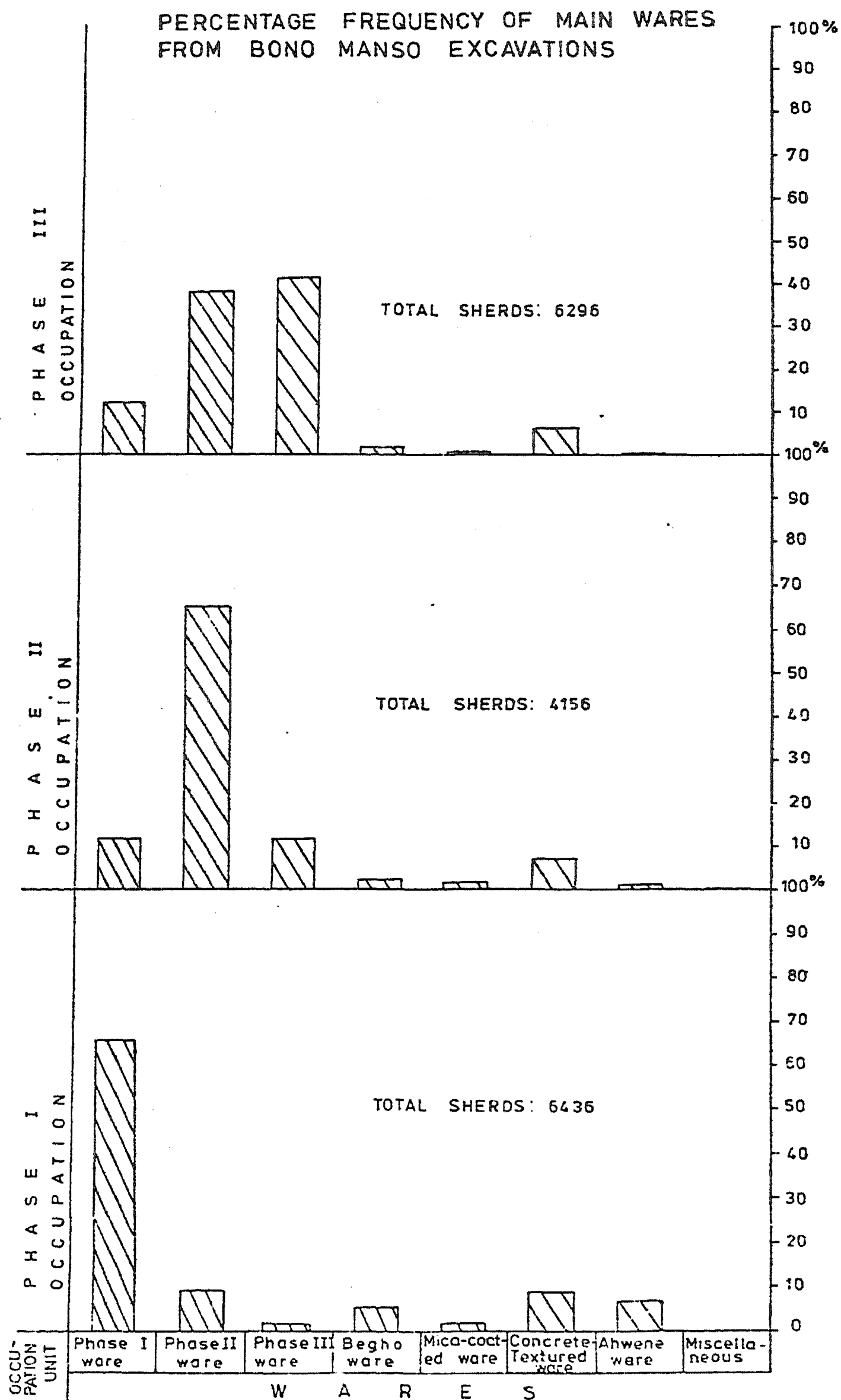


Fig. 3

though the latter ceramic type was easily the more frequent. Similarly, in the Late phase of occupation, Phase II and III were found together, in most cases, in roughly equal proportion, though the latter shows a 'sudden popularity'. Below are details of each of the mounds excavated. For the purpose of comparison the major layers described above are given Roman numbers in the illustrations of the stratigraphies:

Area 104 (BM 73) - A report of this mound formed part of the writer's M.A. thesis (Effah-Gyamfi, 1974:168-77). Only a summary and a few modifications, necessitated by a more thorough analysis, will be given here.

Measuring roughly 32 m across and $3\frac{1}{2}$ m high, this mound is roughly dome-shaped with two main summits, the lower one in the west and the higher one at the centre (fig. 7). A borasus palm (Borassus aethiopum) stands at the central summit which descends more steeply to the east than to the north. Between the two summits which are aligned at right-angles, the lower one trending south-westwards while the higher one trends roughly north-south, is an undulating low ground. A trench 15 m x 1.5 m was cut from the central summit to the foot of the mound in a north-south direction. Three 1 m^2 control pits were also sunk to the south, west and east of the main trench, which was divided into five 3 m units and were designated E18, E21, E24, E27, and E30 from south to north. The three control pits were designated D3, A18, and K18 for the south, west and east pits respectively. Units E18-24, being the highest parts of the mound, had the deepest deposit (c. 1.5 m) while E27-30 had the shallowest deposit.

Although arbitrary levels were used for this mound, the profiles of the trench and control pits (particularly control pit D3) revealed four broad stratigraphic layers within which were minor strata (fig. 8). Below the humic topsoil (layer I) was a thick greyish soil with daub lumps and flecks representing a collapsed wall. It also contained ash lenses, charcoal flecks and pottery. Layer III was a brown sandy soil mostly found in E18 and E21 with an outlier in E24. Below this layer was a thick reddish clay whose upper part, a dark red soil with charcoal

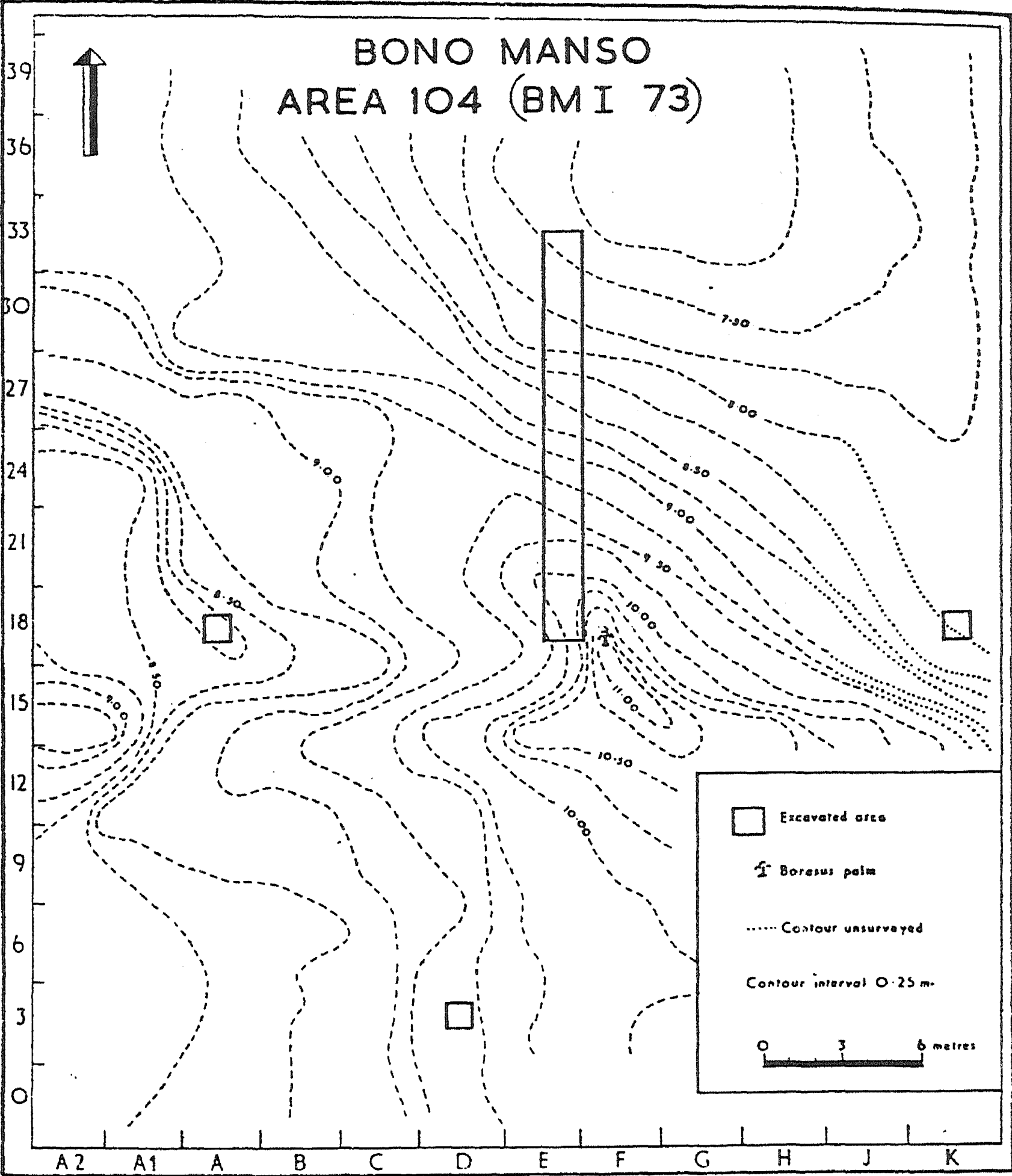
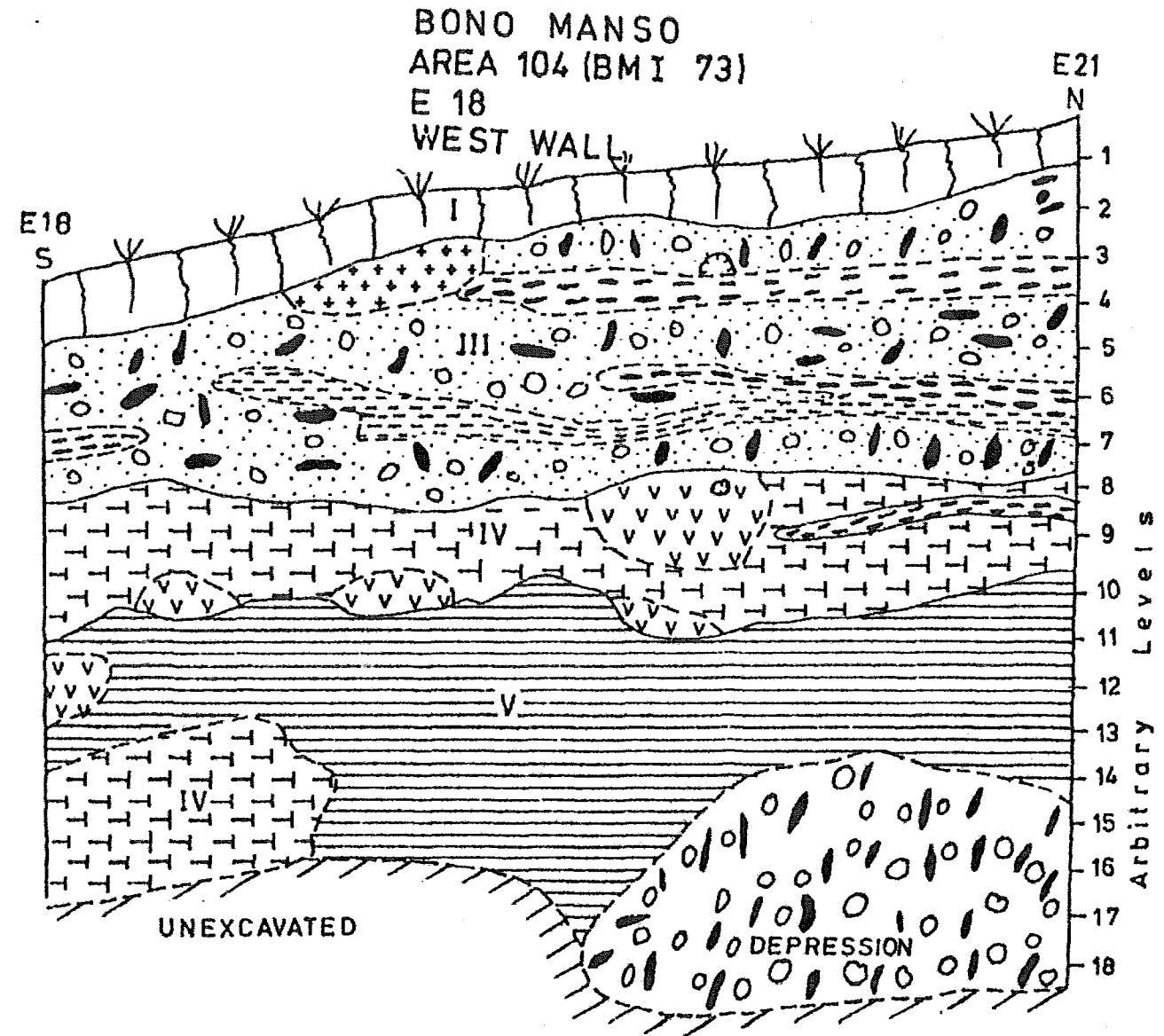


Fig. 7

Fig. 8

-  I Top humus soil with grass rootlets
-  III Grey soil with charcoal, ash and daub flecks
-  IV Dark brown, compact soil with charcoal flecks
-  V Red sticky clay (natural subsoil)
-  Hard, compact red lump (?wall stump)
-  Yellowish sand (?floor)
-  Depression with ash, charcoal and daub concentration
-  Ash and charcoal band
-  Light brown, sandy soil
-  Burrow

0 50 cm.



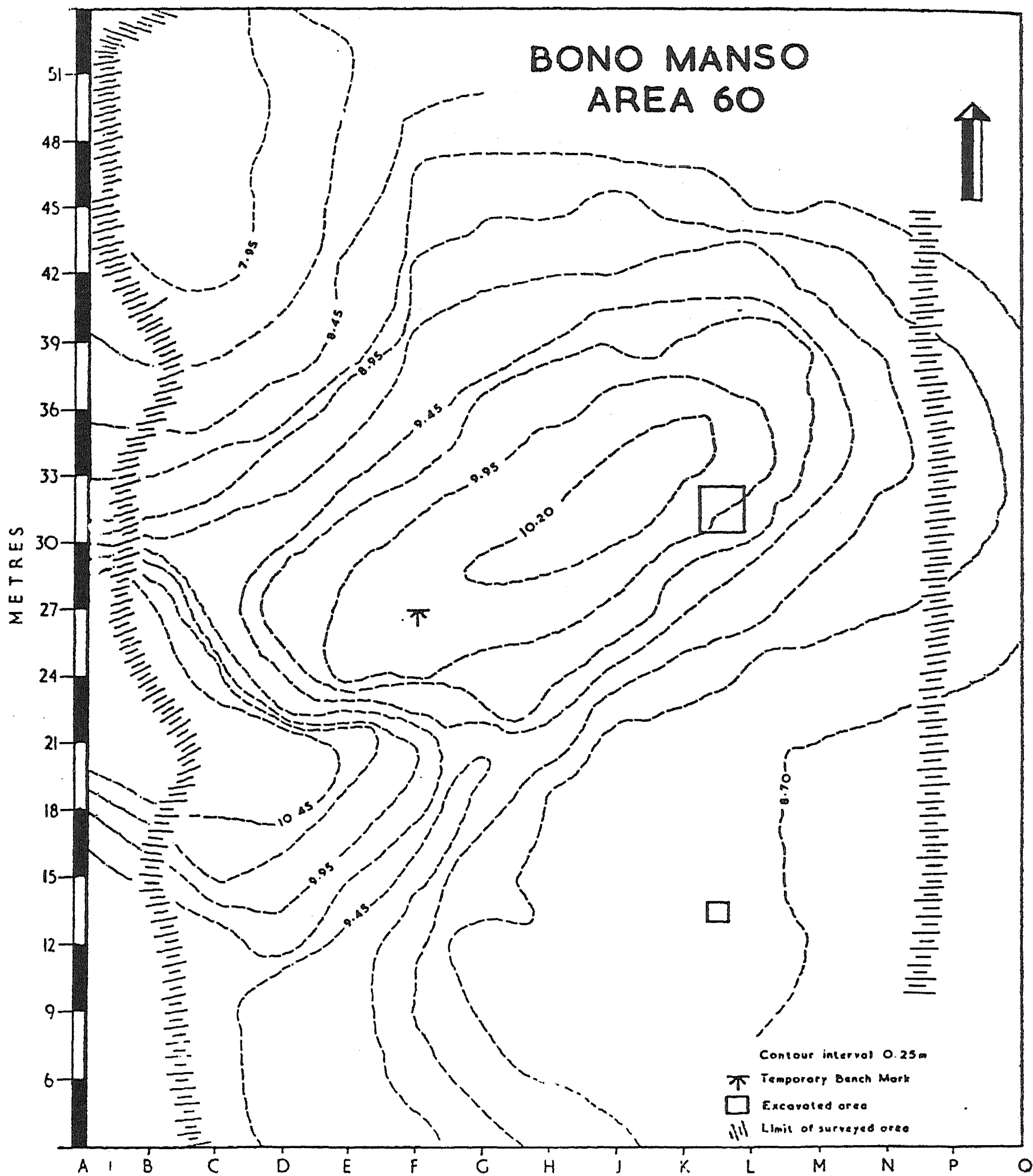


Fig.9

flecks, represents the buried land surface with occupation material while the lower part represents the natural sub-soil. On the whole the mound showed no signs of abandonment in the sequence and may thus represent a continuous occupation. A generally close relationship of the natural layers and the pottery sequence could be noticed. In the top two layers (arbitrary levels 1-8 in E18, see fig. 8) phases II and III wares, which occurred in roughly equal proportion, were very frequent while phase I ware was rare.

In the third layer (arbitrary levels 9-11 in E18, fig. 8) the phase II ware was the most frequent; phase III ware was almost completely absent while phase I ware was in very small quantity. In the fourth layer phase I ware was predominant with a complete absence of phase III ware and only a negligible quantity of phase II ware which may be intrusive. (In the 1973 excavation, owing to the difficulty in distinguishing sherds belonging to "design-painted" group from phase II ware, the latter was given a greater quantity than it deserves in this layer. This will be discussed more fully in Chapter VII). The stratigraphy and the pottery sequence therefore show three main phases of occupation of this mound.

Area 60 - Covering an area of about $48 \times 45 \text{ m}^2$, this mound also exhibits two main summits which are also aligned at right angles but with more plateau-like surfaces than the one excavated at Area 104 (fig. 9). To the north-west the mound descends steeply to a pathway which ultimately leads to the Pankana stream (fig. 5), a feature associated with horses in the oral traditions. Two main pits were sunk here: the main 2 m^2 pit was sunk on the central summit and is referred to as K30. The other one, a 1 m^2 pit was to serve as a control of the stratigraphy and is referred to as K12 (fig. 9).

As with Area 104, the excavation at Area 60 revealed about 1.50 m thickness of occupation deposit. Here too, four main occupation layers were exposed (fig. 10). The top humus was underlain by a reddish-brown layer with few ash lenses and daub flecks. The upper part of this layer was more compact than the lower part. Layer III was a loose greyish soil

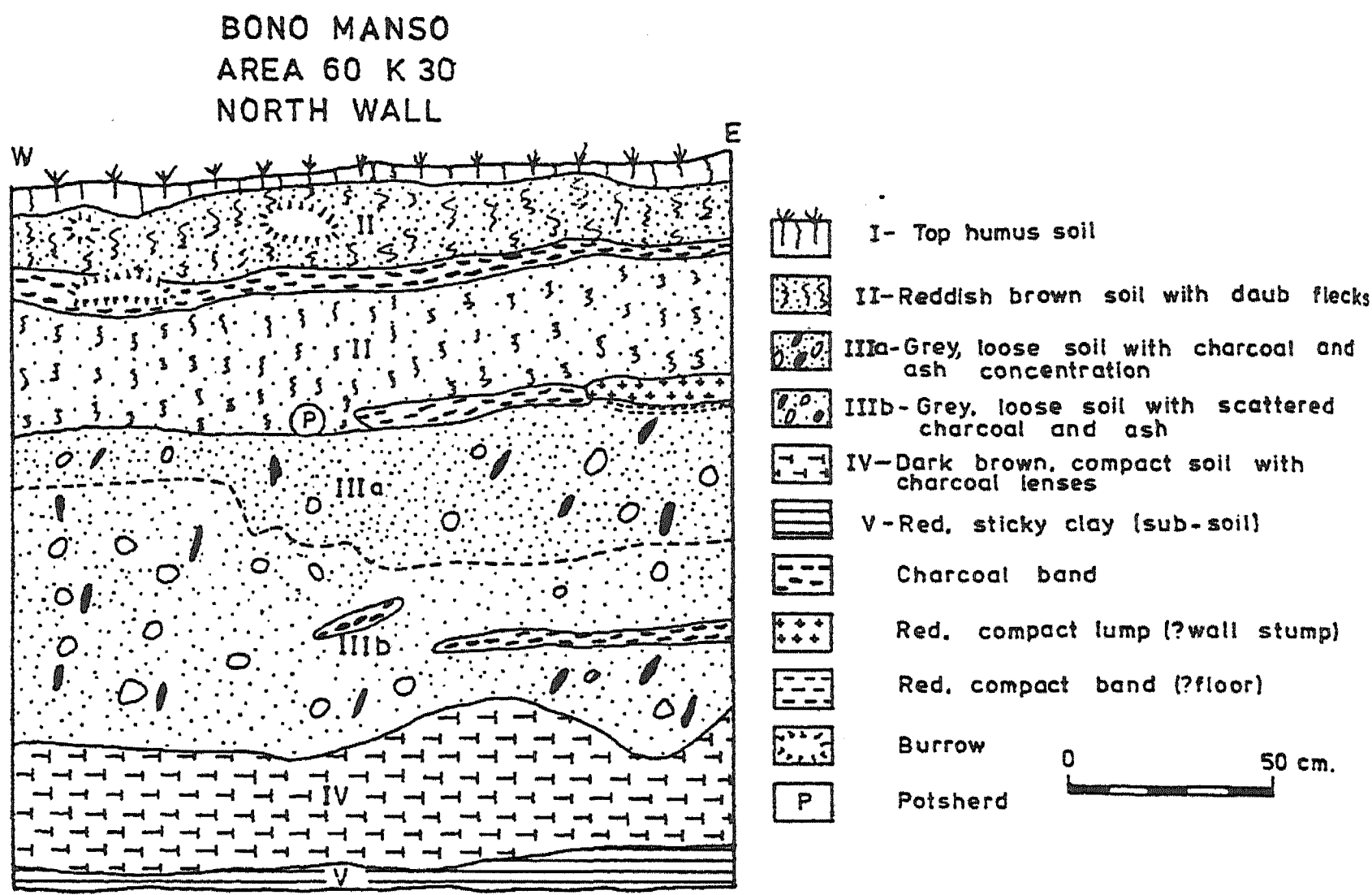


Fig.10

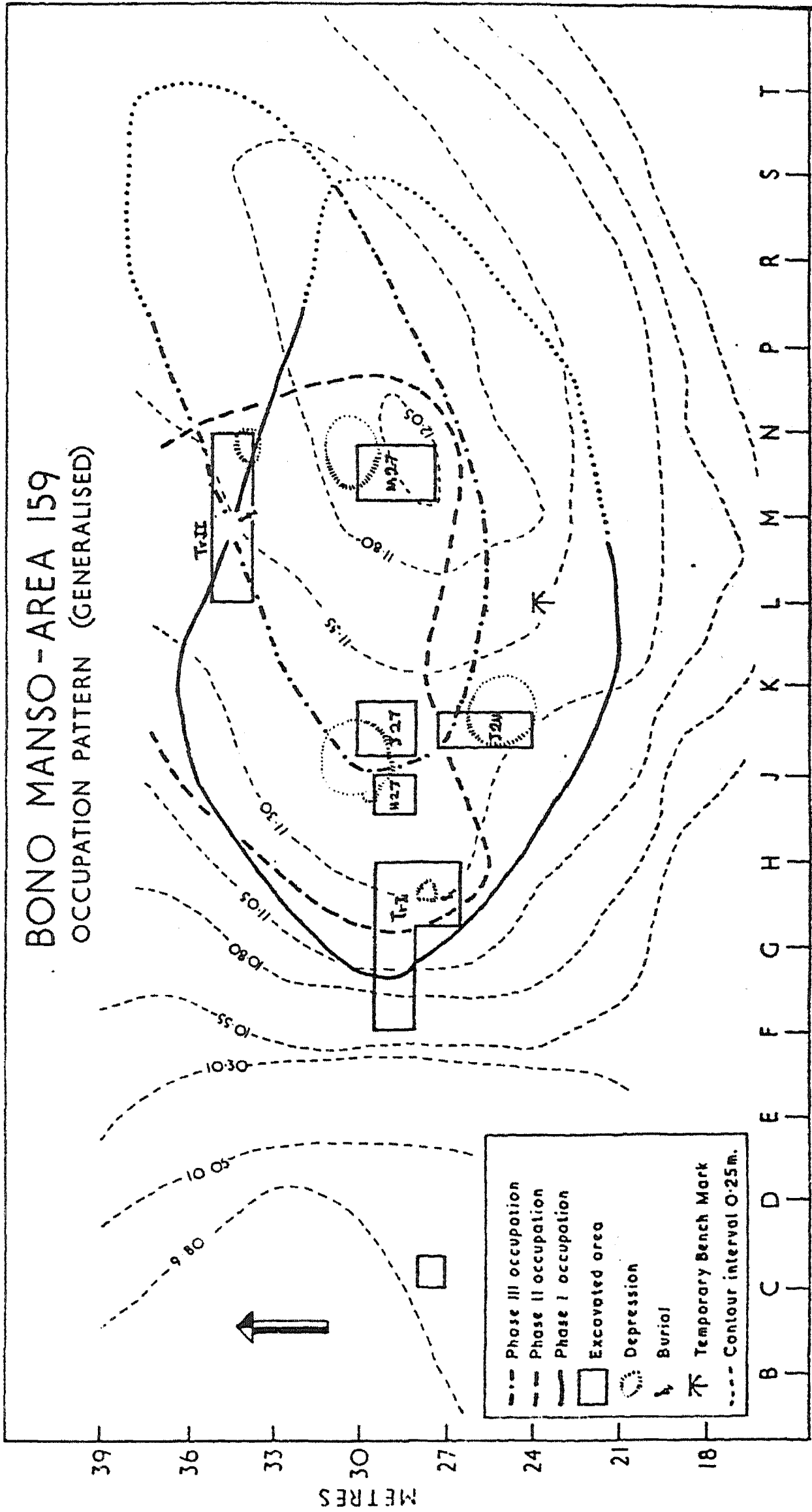


Fig. 11

with quantities of ash and charcoal, the former being concentrated in the upper part. Layer IV was compact, dark-brown soil with charcoal flecks which overlay the compact sticky red clay which is the sub-soil. As with Area 104 the stratigraphy suggested a continuous occupation.

Area 60 showed the most distinct pottery sequence of the three high mounds excavated: layers I and II possessed phases II and III sherds the former being in greater quantity than the latter. Layer III contained predominantly phase II sherds while layer IV contained predominantly phase I sherds. Layer V contained no cultural material and represents the natural sub-soil. This mound also shows three phases of occupation.

Area 159 - The mound excavated here is similar to the two discussed above in shape and size, but differs slightly in the sense that only one summit is conspicuous. Two main trenches each 1.5x6 m were cut at the west and north brows of the mound and were designated trenches I and II respectively (the former was extended later). Four other pits were also sunk, one of these, a 2x3 m² pit, was at the summit of the mound and was designated M27, the other pits being J24, J27, and H27 (fig. 11). But for the depression which will be discussed below, all the pits on or near the summit were sunk to depths averaging 1.5 m before the natural sub-soil was reached. Trenches I and II however, lying at the brow of the mound, reached an average depth of 0.95 m when the natural sub-soil was reached. Although the stratigraphies differed in degree and depth, they showed a general similarity in all the pits, except the depressions (figs. 12-16). The top humus layer was usually between 15 and 20 cm. Below this was a reddish-brown layer averaging 25 cm thick, with charcoal, ash and daub flecks. This second layer was usually underlain by a thick grey soil averaging 35 cm with lenses of ash, charcoal and daub flecks. Below layer III was a band of compact red soil, devoid of cultural materials. This band was very clear in J24, trench I and the southern half of J27; it was not clear in M27 and was not found at all in H27 and Trench II. This layer may represent the floor of a house, either during the second or final phase of occupation (figs. 13 and 15 show this layer more clearly). Below this band was a dark brown compact soil with few charcoal specks

BONO MANSO
AREA 159
M 27 EAST WALL

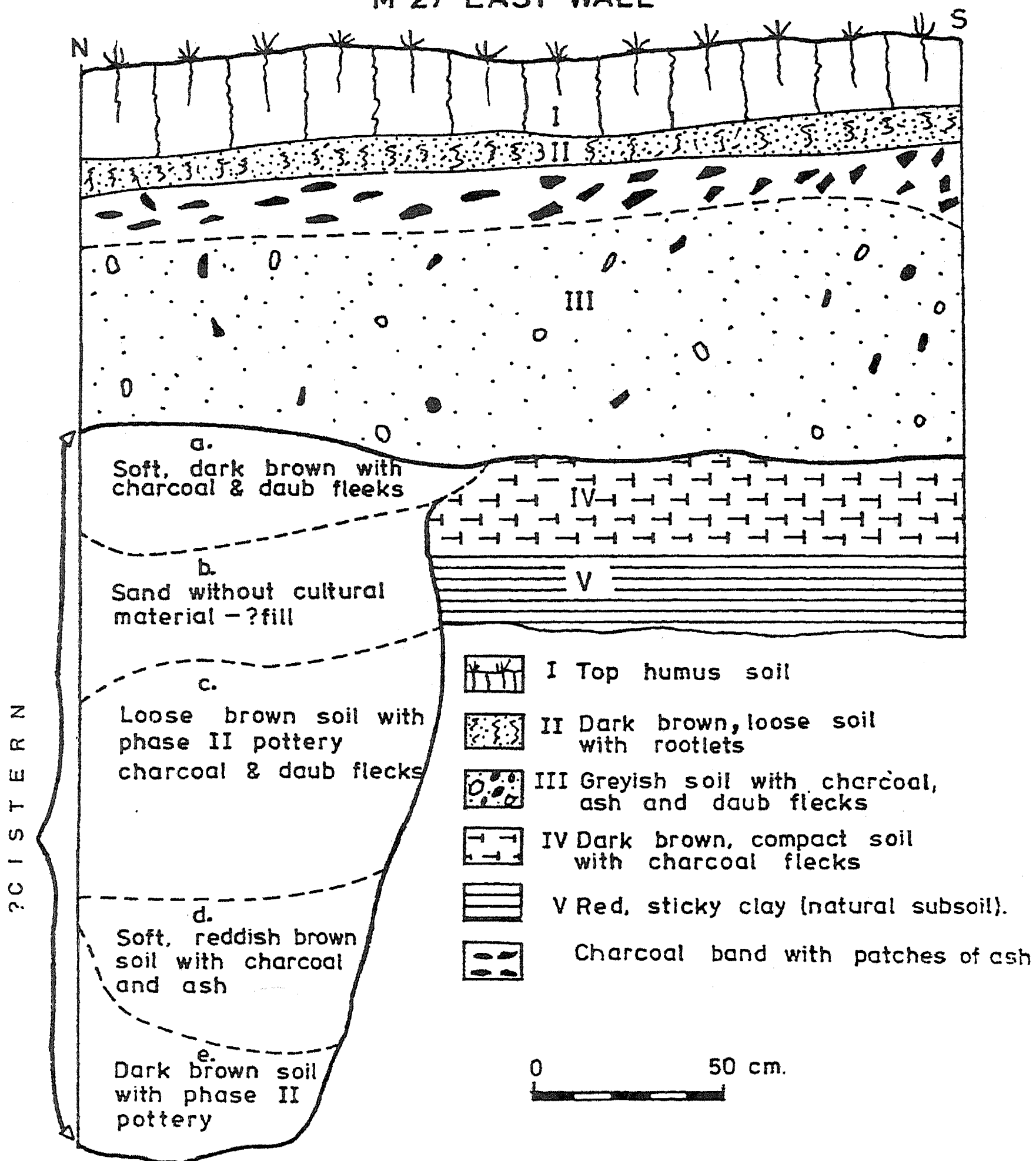


Fig. 12

BONO MANSO
AREA 159 J24
WEST WALL

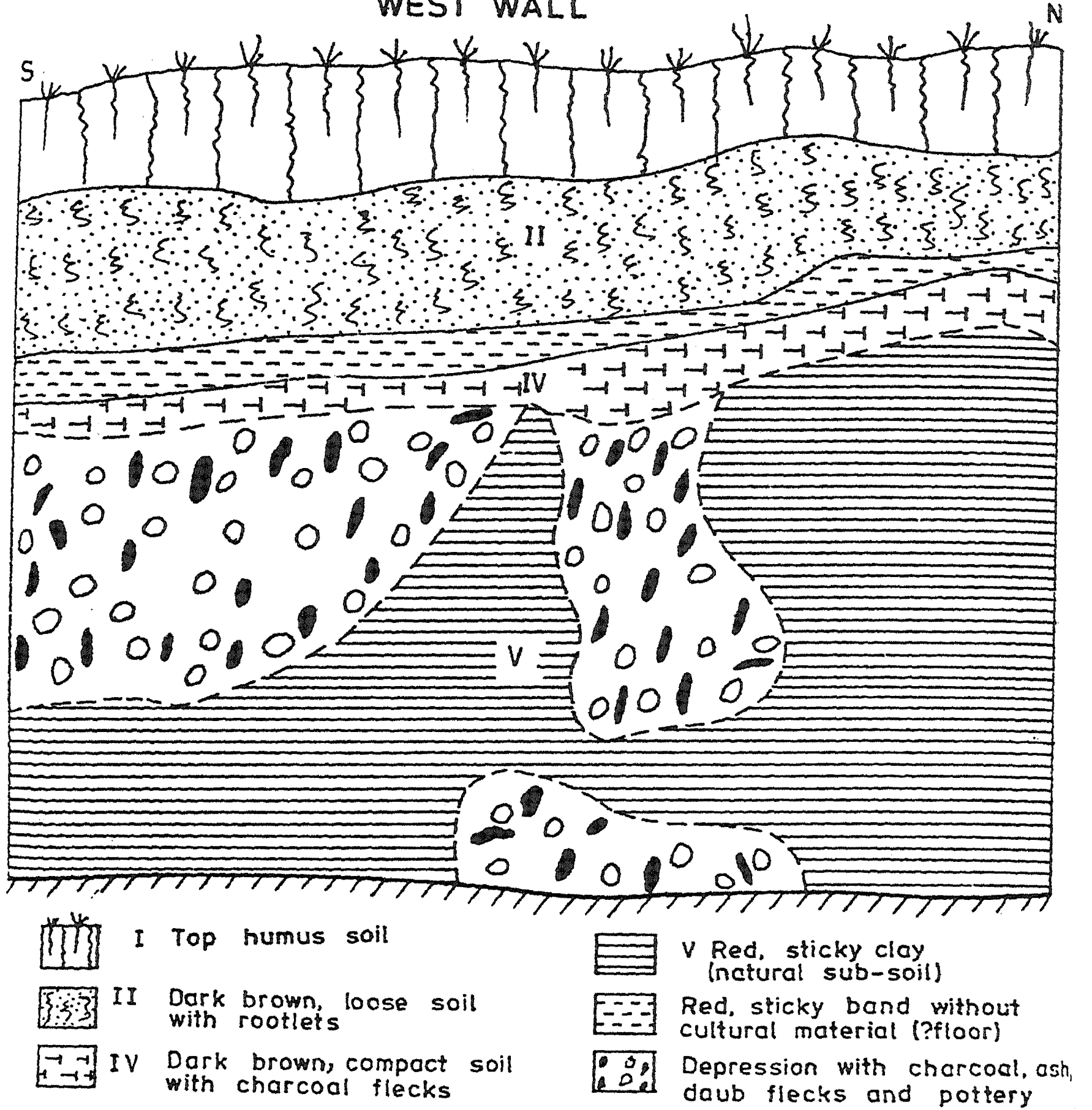


Fig. 13

Fig. 14

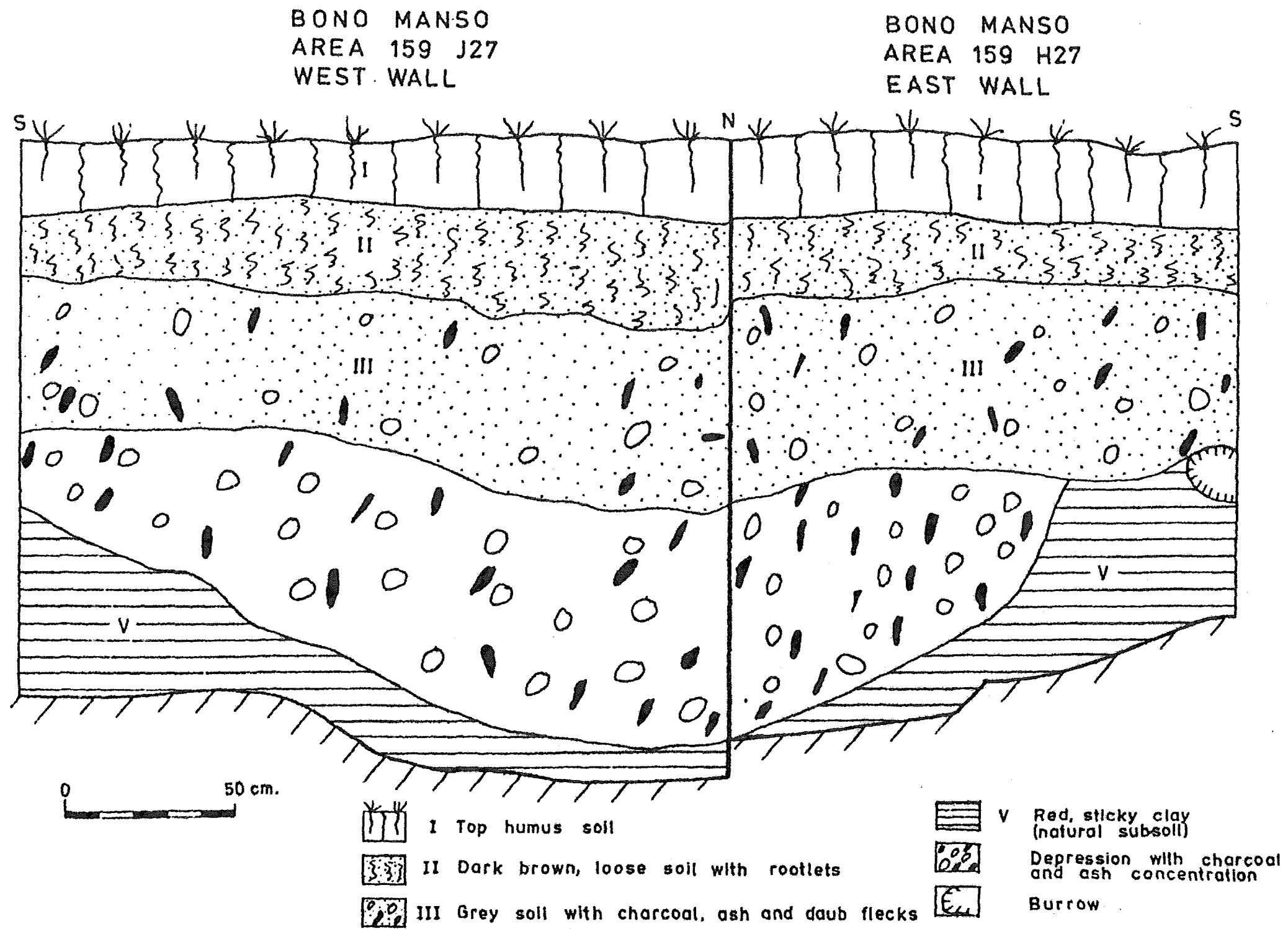


Fig. 15

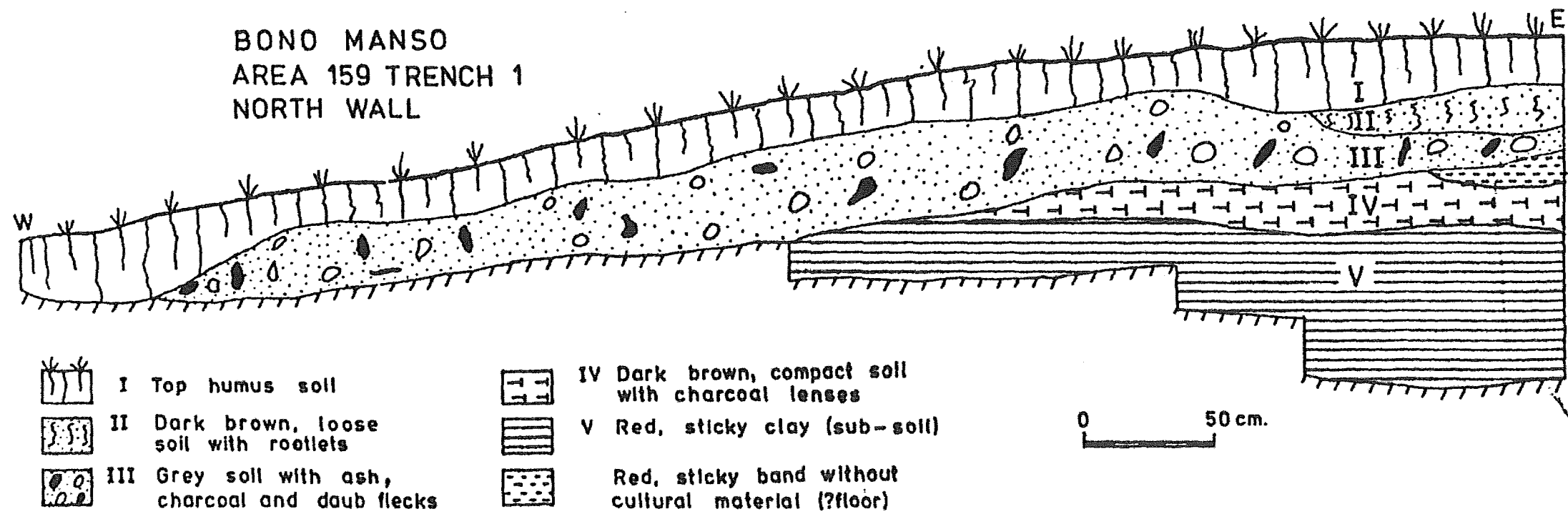
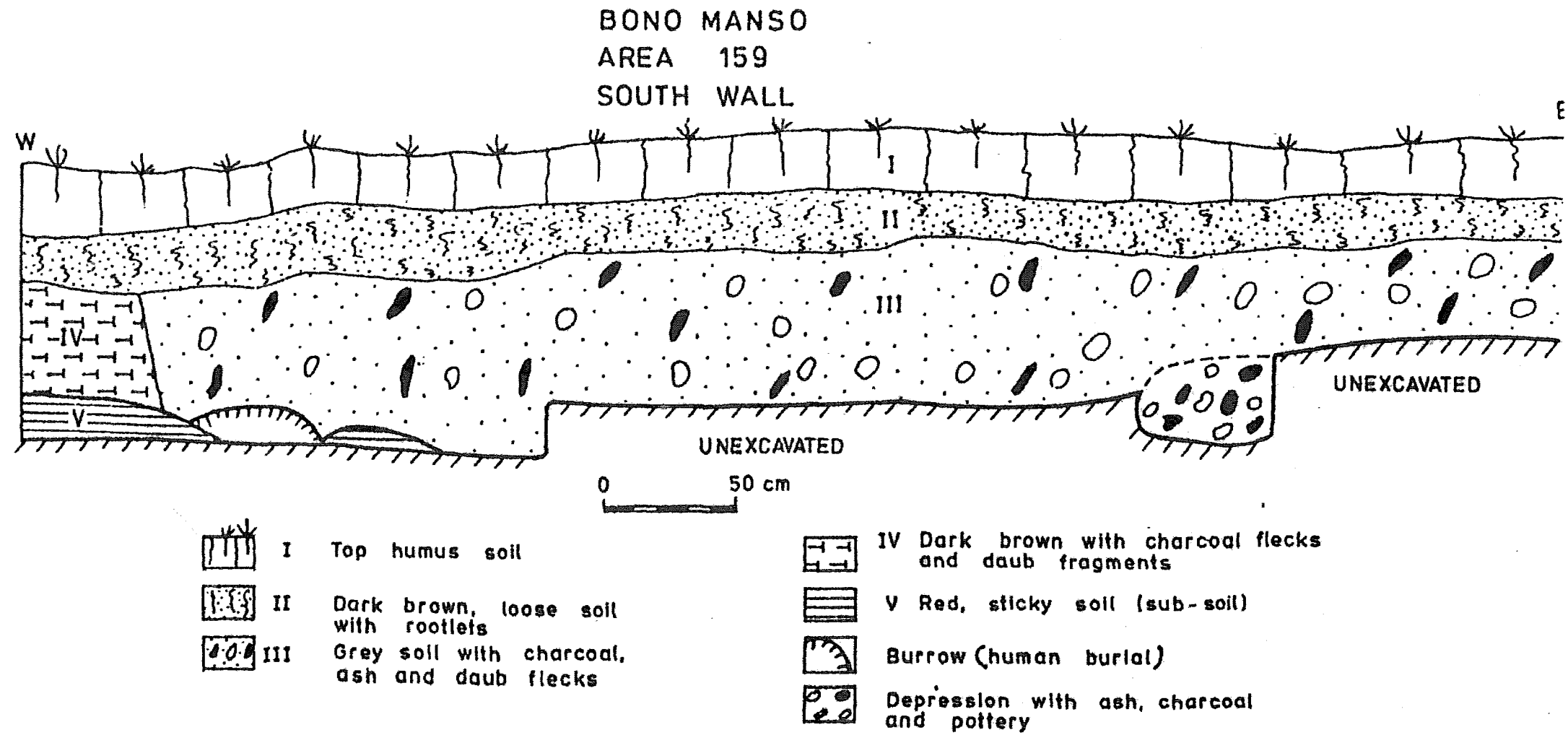


Fig. 16



containing mostly phase I pottery. Layer V was underlain by a thick orange-red clayey soil which was the natural sub-soil.

As with the two mounds discussed above, the three ceramic types formed the majority in the pottery sequence. Here again there was evidence that each of the three ceramic types described above was predominant in each phase of occupation.

A careful study of the areal distribution of these three main ceramic assemblages was made during the excavation of the pits with one interesting result (see table 7 and fig. 11).

Pits J27 and M27 revealed the three phases of occupation. Pit H27 and Trench I showed the first and second phases of occupation only, while J24 and Trench II exposed only the first and third phases of occupation. It is perhaps the three-phase sequence in J27 and M27 which makes those areas of the mound the highest. This latter observation may also be true with E18-E24 at Area 104 which showed clearly all the three phases of occupation and was the highest part of the mound. The table below illustrates the distribution discussed above.

Table 7: General Depth Distribution of Main Wares in Pits Excavated at Area 159

NAME OF PIT	PREDOMINANT CERAMIC TYPE	MAIN LAYERS OF WARE CONCENTRATION	REMARKS
M27	Phase III ware	I, II	Phase II ware also present.
	Phase II ware	III	Few phase III ware present.
	Phase I ware	IV	-
	Phase II ware	Depression (cistern)	-
J27	Phase III ware	I, II	Phase II ware also present.
	Phase II ware	III	Phase I ware also present.
	Phase I ware	IV	Present in southern half of pit.
	Phase II ware	Depression	-

Table 7 contd.

NAME OF PIT	PREDOMINANT CERAMIC TYPE	MAIN LAYERS OF WARE CONCENTRATION	REMARKS
J24	Phase III ware	I, II	-
	Phase I ware	III, depression	-
H27	Phase II ware	I, II, III	A few Phase II sherds present.
	Phase I ware	Depression	Only 15 sherds in depression.
Trench I	Phase II ware	I, II, III	A few phase III sherds found.
	Phase I ware	IV, depression	-
Trench II	Phase III ware	I, II, III	-
	Phase I ware	IV	Present in western end of pit.

b) Architectural and other Features:

The term 'feature' is used here to refer to any patterned occurrence which normally cannot be removed as a single piece. Included in this definition are wall stumps, depressions, postholes and burials.

(i) Wall stump and daub. At Area 104 in layer II, a depth of 25 cm in E18; a red compact lump 30 cm long and 12 cm wide was revealed which gave the impression of a wall stump (fig. 8). It must be noted also that this layer contained the greatest quantity of daub lumps and flecks. A brief ethnographic study of mud wall debris made by the writer in 1976 of collapsed houses in this area has revealed two main types: daub lumps without any broad grooves and those with broad grooves. The former has almost always been found associated with puddled mud walls. This type of building is always constructed by expert builders from the northern part of the Republic of Benin who belong to the Atakpame ethnic group, a name which is now used to refer to this mud wall architecture in this area. It has been suggested that the atakpame^{*} architecture which

*The use of this term here must not be taken to imply that the architecture referred to in the archaeological context was necessarily built by these same experts.

is usually rectangular with a central courtyard is not indigenous to this area (Posnansky, 1975; McIntosh, 1975; 1976; Prussin, 1973), though this writer suspects that this house form was based on an earlier model in this area.

The wall debris with wide grooves is associated with wattle and daub architecture. The wide grooves on the lumps are from the wattle or palm branches which are usually of an average width of 5 cm. It is of interest to note that layers I-III of the trench at Area 104 contained 92 daub pieces averaging 7 cm long and 5 cm wide none of which showed any wattle mark. On the other hand the upper part of Layer IV and the two depressions in this same layers which possessed mainly Phase I ware, contained 30 daub lumps, 10 of which had flat outer parts with the inner parts showing one or two wattle marks averaging 6 cm across. This observation suggests that in the Early Phase of occupation at the site, the atakpame type was not in use, but by the Middle and Late Phases, the wattle and daub type had given way to the atakpame type.

The two types of wall debris mentioned above, were more clearly represented at Area 159. Although no wall stumps were encountered here, a careful recovery and close examination of most of the wall debris in all the pits confirmed the evidence at Areas 104 and 60. This was more clearly shown from the depressions in M27 and Trench I. The former which contained almost exclusively Phase II material turned out 84 daub pieces without any wattle marks at all and therefore probably represented the atakpame type of structure. On the other hand the depression in Trench I which contained almost exclusively Phase I sherds turned out 15 daub pieces, nine of which possessed definite wattle marks. Apart from these two clear examples, the Phase III deposits in all the cuttings turned out daub pieces related to the atakpame type.

(ii) Depressions were common at Areas 104 and 159. Two depressions were encountered at Area 104, one to the north-western end of the west face of E18, and the other in the central part of the west face of E24. They seemed to have been both generally aligned in a north-south fashion.

Containing exclusively Phase I pottery, these two depressions were encountered in the sticky, red clay of Layer IV. The mouths of these depressions lay outside the area excavated. Since they both possessed only Phase I pottery it may be said that they were made and used during the Early Phase of occupation only.

Of the two, the depression in E18 was larger, measuring 1 m deep. In order to discern its complete shape, the western wall containing the depression was excavated and this revealed a circular feature measuring $1\frac{1}{2}$ m in diameter. The depression in E24 was smaller, shallower and less circular, measuring 60 cm in diameter and 50 cm deep.

It is difficult to interpret the purpose of these two depressions. The one in E18 contained diagnostic pottery and a large quantity of iron slag with charcoal and ash. It seems that the slag found here may belong to the smithing process rather than to smelting (Pole, 1975:19). This will perhaps explain the presence of these pieces of slag in the settlement. The depression here would probably have been a borrow pit from which clay was dug to build the house during the Early phase of occupation. Based on ethnographic studies and oral traditions from this area such a pit would be between three and five metres behind the main house (McIntosh, 1974, 1975, 1976). After constructing the house this would then be used as a rubbish pit. The finds here would have been discarded by the occupants during the Early phase of occupation.

The depression in E24 was marked by black, burnt soil with long, thin charcoal flecks which may suggest burnt grass. It also contained burnt bones and pieces of daub with wattle marks. There were two almost complete Phase I pots and large fragments of pots, some of which had clay laminations with perforated bases referred to in the traditions and ethnographic studies as bukya (hearth pots). This depression may also represent a borrow pit later used as a rubbish dump.

Virtually every cutting at Area 159 revealed depressions varying in size and depth. A circular depression was shown in the opposite section of pits H27 and J27. It was shallow, measuring about 1 m across and 27 cm deep and it rested directly on top of the natural sub-soil (fig. 14).

BONO MANSO
AREA 159
J.24
FLOOR PLAN
AT 1.50m BELOW SURFACE

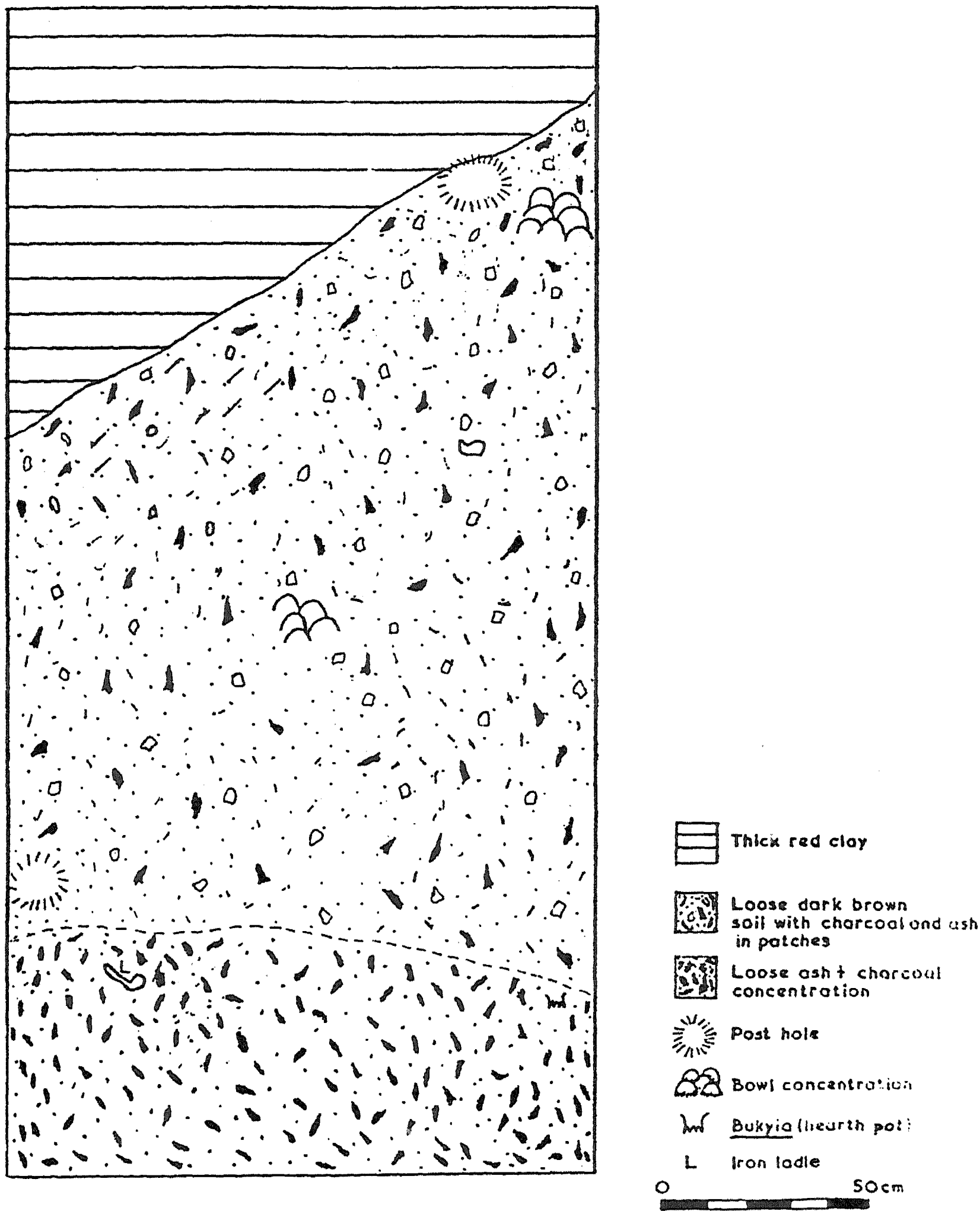


Fig.17

It contained mainly Phase II pottery. Trench I contained a roughly barrel-shaped depression. Measuring 1.17 m in diameter and 1.23 m deep, the depression here was encountered in Phase I occupation. It narrowed as it went down, and contained very soft, whitish clay devoid of any cultural material which would suggest its being in use during the Phase I occupation. At the bottom of the pit a narrow channel, 39 cm long and 11 cm wide was found leading southwards. This would suggest, in view of its relatively shallow depth, that the depression was a shallow cistern to collect water.

Pit J24 revealed a large depression with two bifurcations, one to the south and the other to the west (fig. 13). This depression was encountered at 1.47 m below surface. Although not all the depression was excavated, its shape in this pit suggests a diameter of about 2 m. Directly on top of this depression were two groups of bowls, the one to the north numbering eight while the southern one numbered five (fig. 17). These two groups lay directly on top of an ashy area. Fifteen centimetres behind the northern group of bowls was a posthole. Such an arrangement would almost certainly have nothing to do with the depression below, suggesting that after the depression had been filled, the place was re-occupied.

Pit J24 depression contained the largest quantity of pottery at Area 159. There was no evidence of the Phase II ceramic type in this depression. The sherds were predominantly Phase I type, though there were significant ceramic changes in the latter: whereas Phase I sherds are characteristically crude, there were important advances here. For example, some of the sherds were very carefully burnished, and possessed decorations other than the characteristic irregular incision and grooving; and some were also carefully smudged - three important deviations from the Phase I ceramic type. In addition there were other sherds which looked very much like the Phase III type having flakes of mica and some similar pot forms. This became an initial puzzle, but a careful look at all the sherds in this category showed that they almost all had an application of red slip which is a very uncharacteristic feature with Phase III ceramic type but which is reminiscent of pottery

at Begho (Posnansky, 1973b). A comparison of these sherds with those from Begho (Crossland, 1973), and Ahwene Koko, the capital of the Wankyi state (Boachie-Ansah, 1978) revealed that though the two latter sites share similarities in their possession of carinated pot forms, the Ahwene Koko sherds are characteristically poorly slipped with flakes of mica (Boachie-Ansah, personal communication). It became clear then that the sherds here were most probably imported from the Ahwene Koko area and did not belong to the Bono Manso Phase III ceramic group. It would seem therefore that this depression contained what may from now be termed a late Phase I ceramic type, this is supported by radiocarbon dates, and the absence of any smoking pipes which are characteristic of Phases II and III.

At a depth of 1.55 m below surface, Pit M27 revealed half of what looked a circular well-like cistern (fig. 12). This depression was made directly below the Phase I occupation into the sticky red clay sub-soil until it reached bedrock at a depth of 2.1 m below the natural sub-soil. Its shape suggests a well which was probably dug and used during the Phase II occupation. After this phase of occupation the well was probably abandoned and used as a refuse pit. This may account for the almost exclusively Phase II pottery. The upper 50 cm of the pit contained a loose, sandy sterile soil suggesting that at a later period this depression was filled apparently to enable Phase III house to be constructed (fig. 12).

It would therefore seem that though there were many depressions each phase of occupation was associated with at least one of them: the depressions in pits H27, J27 and M27 were exclusively Phase II features; the J24 and Trench I depressions were most probably dug in the Phase I occupation, the former having been probably used, first for the construction of the house and then as a refuse pit, while the latter could have been a cistern to collect water and which was in use until the abandonment of the occupation; and Phase III was also associated with the shallow depression in Trench III.

Combining the stratigraphic and pottery sequence with the distribution of depressions at Area 159, there emerge three geographically distinct, though overlapping, phases of occupation at the site: Phase I

was concentrated in the southern part of the mound; Phase II in the central and western half and Phase III towards the north and east (see fig. 11).

(iii) Postholes. No posthole was encountered at Area 104, nor at Area 60. However, at Area 159 a total of 6 postholes were revealed. The table below shows their distribution.

Table 8: Distribution of Postholes at Bono Manso Area 159.

PIT NAME	DEPTH AT WHICH POSTHOLE WAS ENCOUNTERED IN METRES	DIAMETER OF POSTHOLE IN CM.	DEPTH OF POSTHOLE IN CM.	REMARKS
1. J24	1.08	25	22	NE of pit behind group of bowls. See plate 9 and fig. 22
2. J24	1.08	18	15	SW of pit
3. M27	1.47	19	17	-
4. J27	1.05	20	18	-
5. H27	0.95	15	15	-
6. Trench I	0.97	27	21	Close to Cistern

They were generally at the same depth below surface and in the same layer, and were probably related to the Early phase of occupation when wattle and daub structures were in use.

C Burials:

Three adult and one infant burials have been discovered at Bono Manso. Two adult and one infant burials were exposed at Area 159 from Trenches I and II while the other adult one was exposed at Area 104.

At Area 104 a complete, well-preserved skeleton was discovered at 1.20 m below surface in E18, close to the south wall of the trench.

The burial probably belonged to the Phase I occupation, and two small Phase I bowls, one of which rested in the hands while the other was close to the hip bones were found. Lying in a crouched position on its left hand, the head faced east, and 25 cm from the knees a Phase I pot, one edge of which was broken, was found.

The burial in Trench I at Area 159 was found at the tail-end of the mound and at a depth of 80 cm below surface. Though the stratigraphy above was undisturbed there was a disturbance at the southern wall where the legs lay. The burial lay in a crouched position on its left side head was facing east with two bowls, one resting in the left hand and the other near the knee. Eleven beads were found around the neck.

The Trench II adult burial was encountered at a depth of 98 cm below surface. As was the case with the two burials described above, a bowl lay, this time not in the hand, but 20 cm north of the skull. Quite unlike the other two, this burial was facing west, but was in a similarly crouched position as the others. Here again the south wall was disturbed (fig. 16) suggesting that it was laid, not in a vertical shaft, but perhaps from a horizontal one in the same way as the others.

The bowl associated with the burials which is very characteristic of the two upper occupations, coupled with the shallow depth, and the absence of any Phase III sherds in this part of the trench would go to suggest that it belongs to Phase II though, as with the Trench I burial, the grave was probably dug into the Phase I deposit.

Professor Engmann of the Department of Anatomy, University of Ghana Medical School, has kindly looked at the three adult skeletons and has concluded that all the three were females aged between 30 and 40 years. Except the Trench II burial which has a healed pathological fracture of the right tibia, no other disease or accident was detected on the burials.

At 70 cm below surface in Pit M27 a complete pot was uncovered belonging to Phase III ceramic type. It was only slightly tilted towards the east. On sieving the soil it was found out that the pot contained tiny rib-bones and a small skull measuring 69 mm across. The teeth had not emerged from the socket and was probably a child who died at

birth or at an age of under six months.

Oral traditions are unanimous that until very recently children under one year were often buried in pots, and the word kukuba (pot child) refers to such a custom. Such a burial was usually behind the house or in a rubbish dump.

Traditions regarding ancient adult burial practices in this area are interesting (Effah-Gyamfi, 1974:58-59):

except for the kings there were no public cemeteries in the ancient Bono state. The dead were usually buried in their rooms by the dokomona (hall and chamber) method in which a vertical shaft was sunk with a 'chamber' in the side wall. The dead was placed in the 'chamber' together with his most important items. Among these were clothes, food, sponge and nsamankuruwa (dead man's cup), the last of which was to be used in drinking water during his journey to asamando (under-world). The men were placed in a north-south fashion, lying on their left hand and facing east 'to rise up and go to farm'. The women are also said to have been placed in a north-south fashion. Although the traditions are not clear whether they lay on their right hand or not, this is likely in view of the fact that they are said to have been laid facing west, 'to start cooking the evening meal'.

The stratigraphical contexts of the three adult burials seem to confirm that they were not laid directly in a vertical shaft and that quite probably the chamber method was in use at Bono Manso. Indeed all the three burials exhibit an identical burial arrangement, and possess the ubiquitous burial bowl. This 'burial bowl tradition' was not found at the Begho Brong quarter (Posnansky, 1973c) nor at New Buie (York, 1973) to the west and north of Bono Manso respectively and it would seem to suggest a tradition typical of the Bono state.

2 EXCAVATION OF LOW MOUNDS (AREAS 139, 171 and 245).

a) Nature of Mound and Stratigraphy - General Observations:

Mounds in this category are generally low, rising to not more than 1.5 m and measuring not more than 25 m across. Except the intermediate mound (Area 245) which showed two phases of occupation, the two other

mounds revealed cultural deposits for only the Early phase of occupation. Although generally of shallow depth, averaging 75 cms, the stratigraphies of these mounds are variable, quite unlike the high mounds. Lacking the central depressions of the high mounds the low mounds would seem to represent structures without courtyards, possibly squarish or round huts but certainly not the rectilinear atakpame type suggested above for the phases II and III occupation. Below are details of the individual mounds excavated:

Area 139 - Covering an area of roughly 20 by 18 metres, this mound measured 95 cm high and 20 m across. The mound was 40 m west of the Local Authority Primary School and the whole area where it was located had been ploughed heavily, ready for a tobacco farm. Though very low it was made conspicuous by a low sedge locally called ananse atadwe (false tiger nuts - Cyperus rotundus). Local inhabitants claim that this type of weed replaces the low grass, sere (Imperata cylindrica) after an area has been continuously cultivated. However, it would have been expected that since the whole area has been continuously disturbed for agricultural purposes, the weed would not have been restricted to the mound but would have been widespread. It is possible therefore that its isolated presence here suggests that the occupation mound has a different nutrient content from the surrounding area.

Four pits were sunk here (fig. 18). The major pit was excavated 2 m x 2 m on the summit of the mound (C12). To the north of it in C15 was a 1m x 1m pit, while the other two, each 50 cm x 50 cm were sunk to the west and east (A12 and E12 respectively). Pits C12 and C15 registered an average depth of 1.02 m before the natural sub-soil was reached. These two pits also had almost identical stratigraphy of which four main layers were detected (fig. 19); the first layer was a brown humic soil with rootlets. It contained large quantities of charcoal. Below this layer a loose, red soil, sandy in touch, was encountered with only a few charcoal flecks, the lower part containing more pottery than the upper part. Layer III was a compact orange-red soil whose lower part was more compact than the upper part. This layer contained pottery and few pieces of slag. Below this

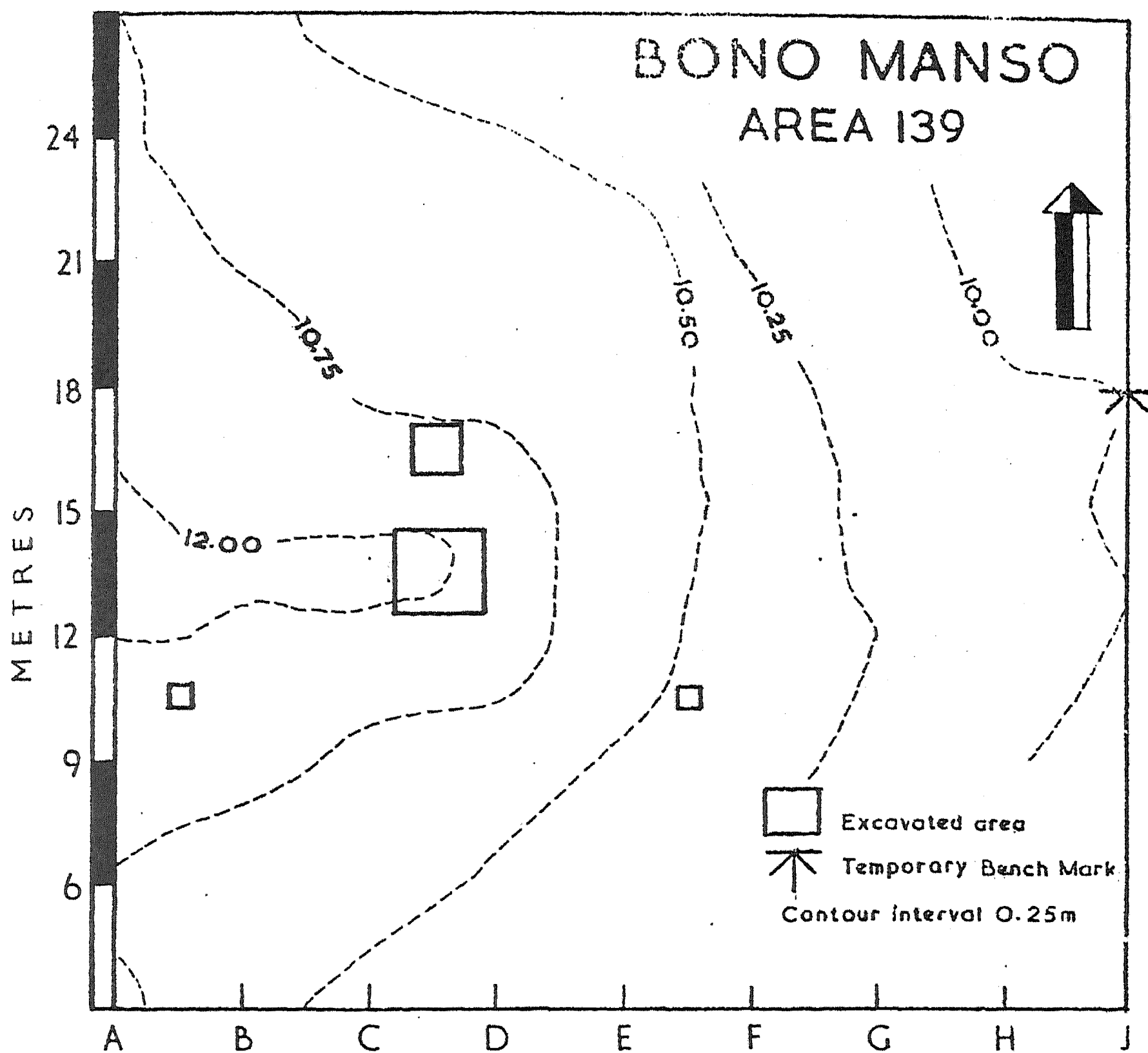
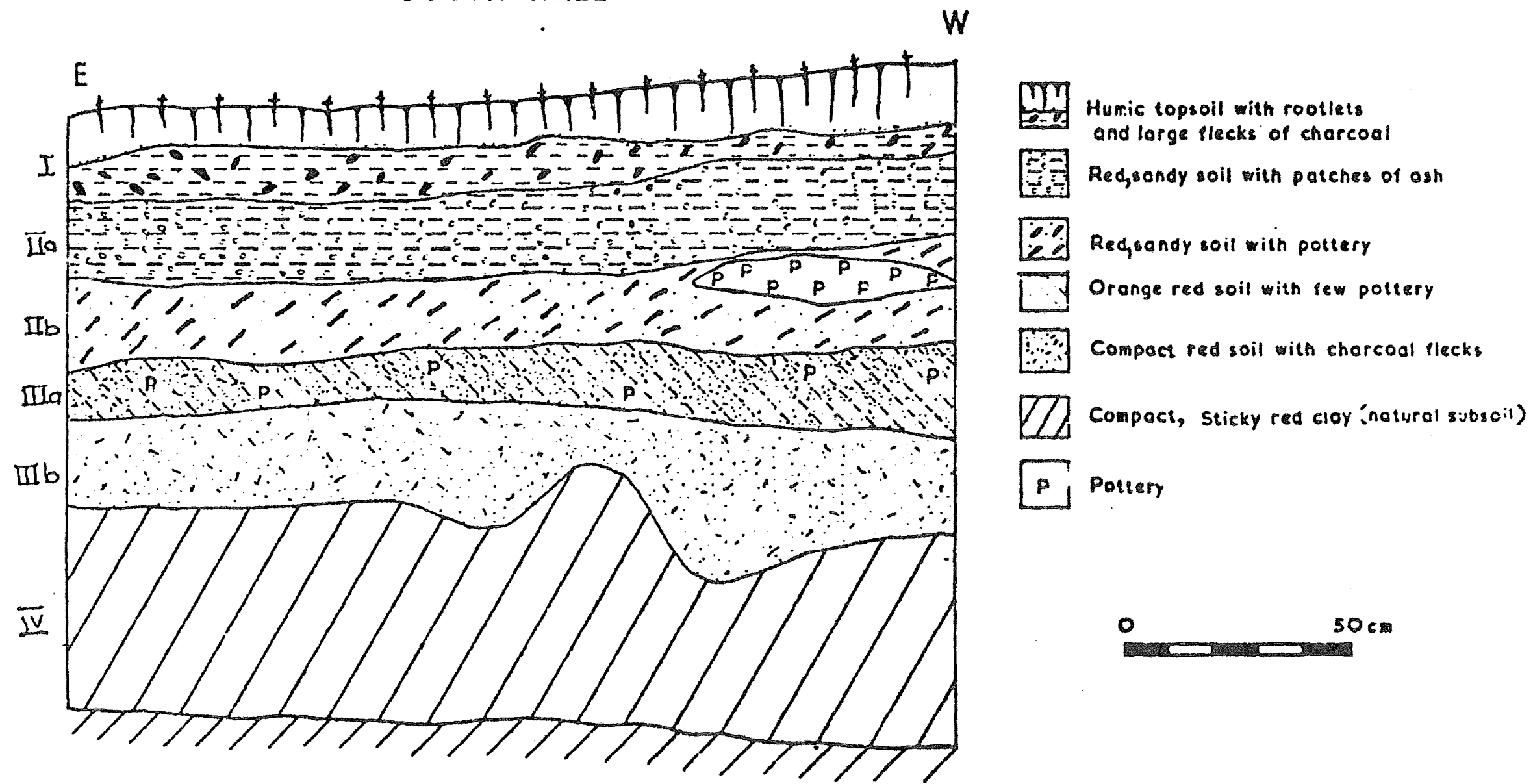


Fig.18

Fig. 19

BONO MANSO
AREA 139 C12
SOUTH WALL



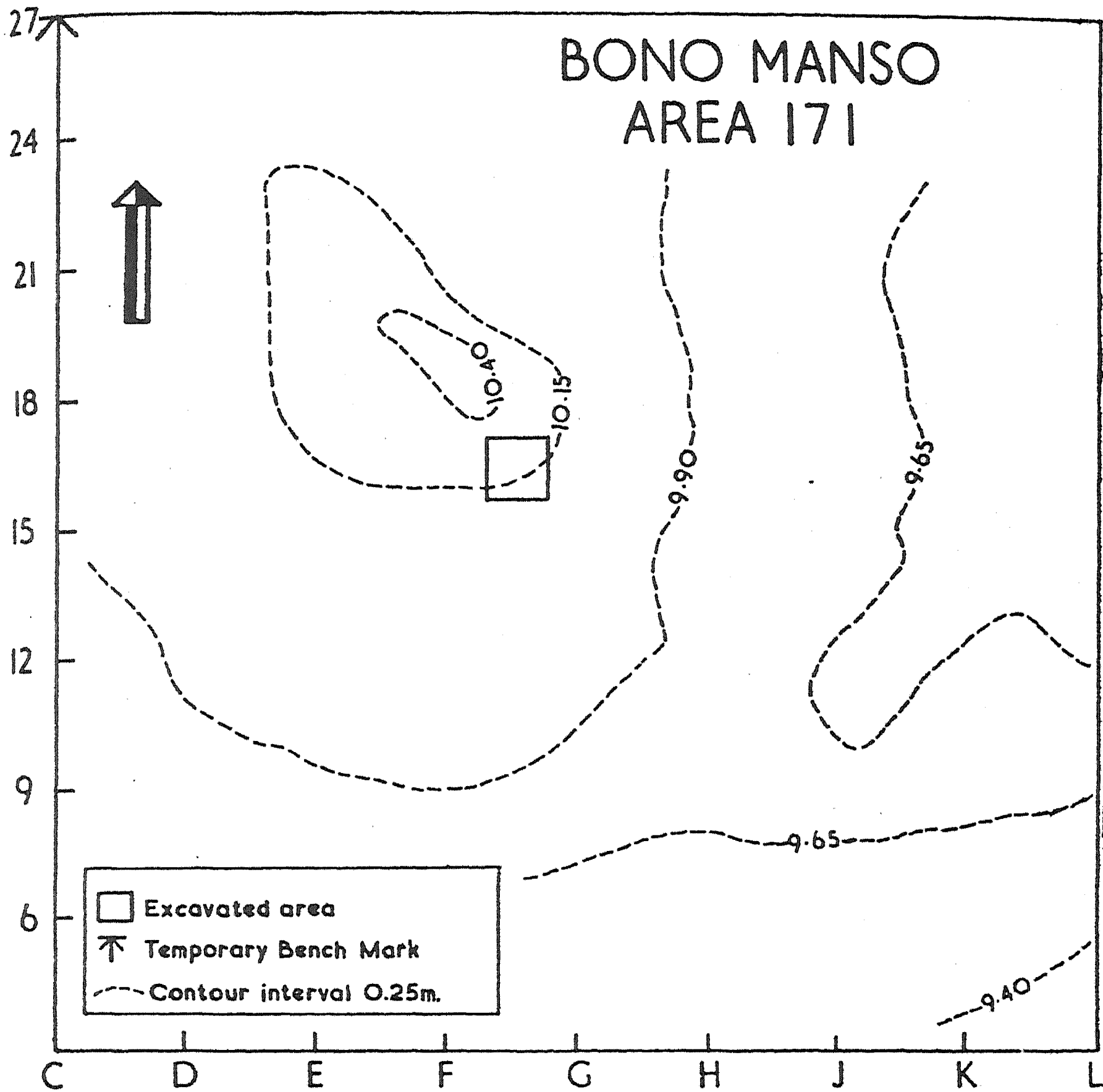


Fig.20

BONO MANSO AREA 171 NORTH WALL

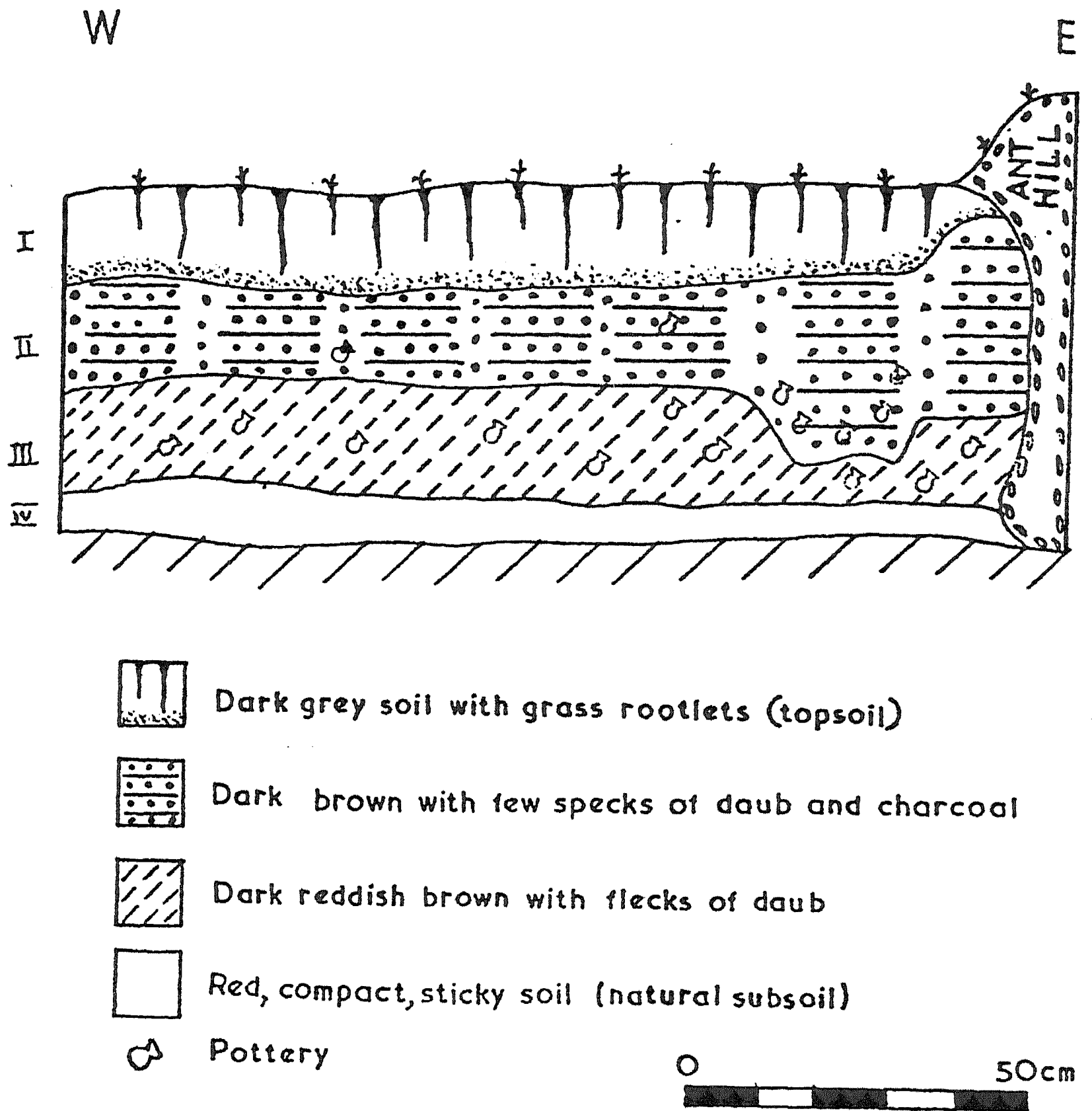


Fig.21

was a sticky red clay which was devoid of cultural materials.

In the two small test pits (A12 and E12) the first two layers described in pits C12 and C15 were followed by the sticky red clay natural sub-soil at depths of 52 cm and 67 cm respectively. From all indications, the site was almost certainly occupied once.

Pottery concentration was in the first two layers, decreasing steadily in layer III until virtually none was found in layer IV. Roughly over 80 per cent of the pottery belonged to the Phase I ceramic type; none of the Phases II and III ceramic types was encountered. The rest of the pottery was of different ceramic types most probably imported into the area (see Chapter VII). The sherds here were extremely weathered and fragmented; in each layer where pottery were encountered, more than 75 per cent were less than 3 cm long.

Area 171 - The mound here measured 1 m high with an area of roughly 24 by 20 metres. It was more conically shaped than the one excavated at Area 139. The mound was located in a groundnut farm and the top 20 cm soil had been used for low groundnut mounds.

Only a single $1\frac{1}{2} \text{ m}^2$ pit (F15) was sunk towards the summit of the mound (fig. 20). As usual, only 48 cm of occupation deposit was revealed, the natural sub-soil coming into sight just at 49 cm below surface (plate 14, fig. 21). The top soil was dark grey, slightly humic with very small fragments of pottery. This layer was underlain by a dark brown, sandy soil with charcoal flecks and pottery. Below this was a reddish brown soil but more clayey than the one above. This contained very large, diagnostic sherds and daub flecks. The natural sub-soil, a red, sticky clay, was encountered after the third layer and contained no cultural material.

Pottery concentration was in the third layer though all the layers produced almost exclusively Phase I ceramic type without Phases II and III types at all. As with Area 139 a few imported sherds were however associated with the Phase I ceramic type.

Area 245 - This site did not indicate any definite summit, and covered an area of roughly 20 by 15 metres.

A shallow depression (not clearly shown in fig. 22) was found in

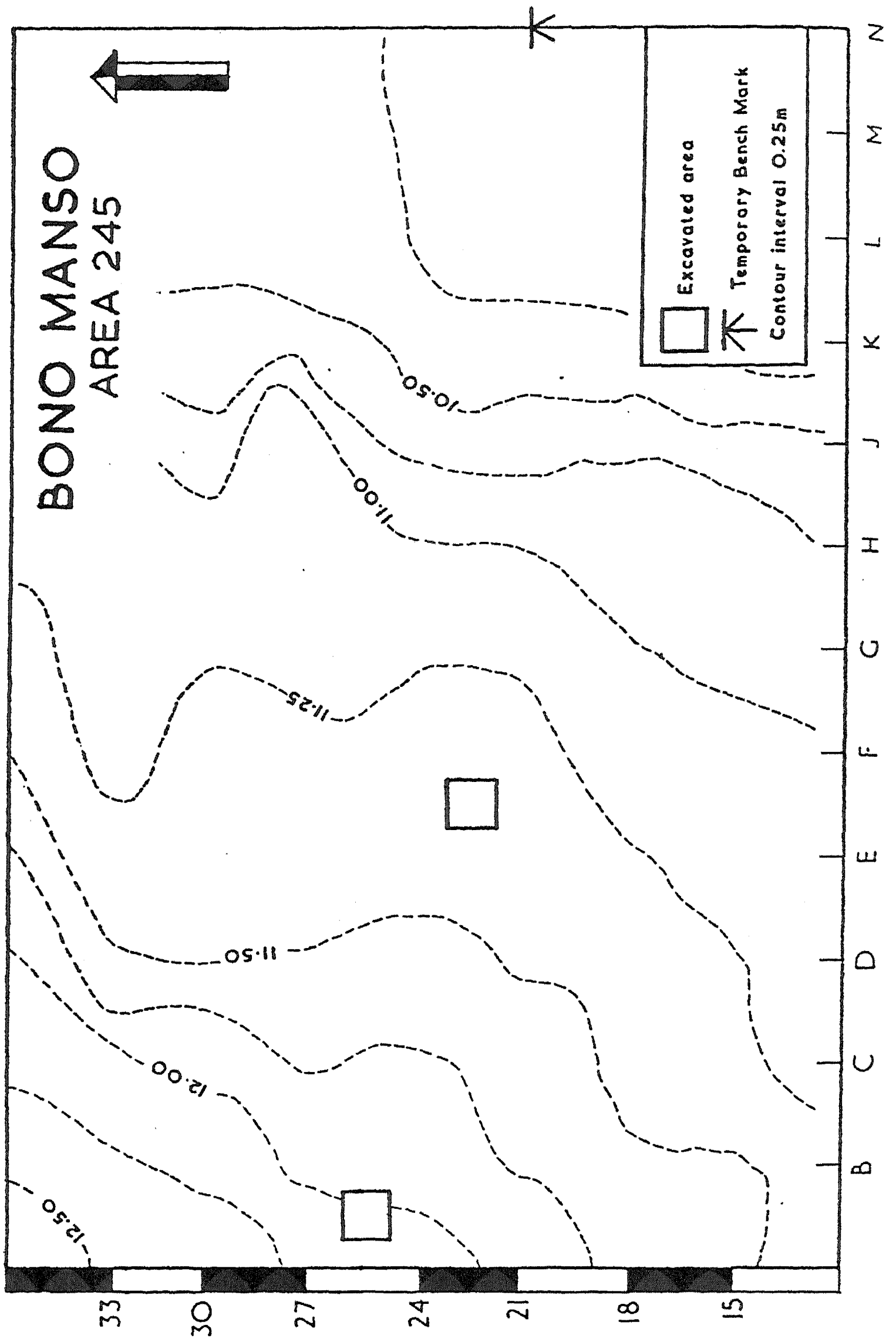
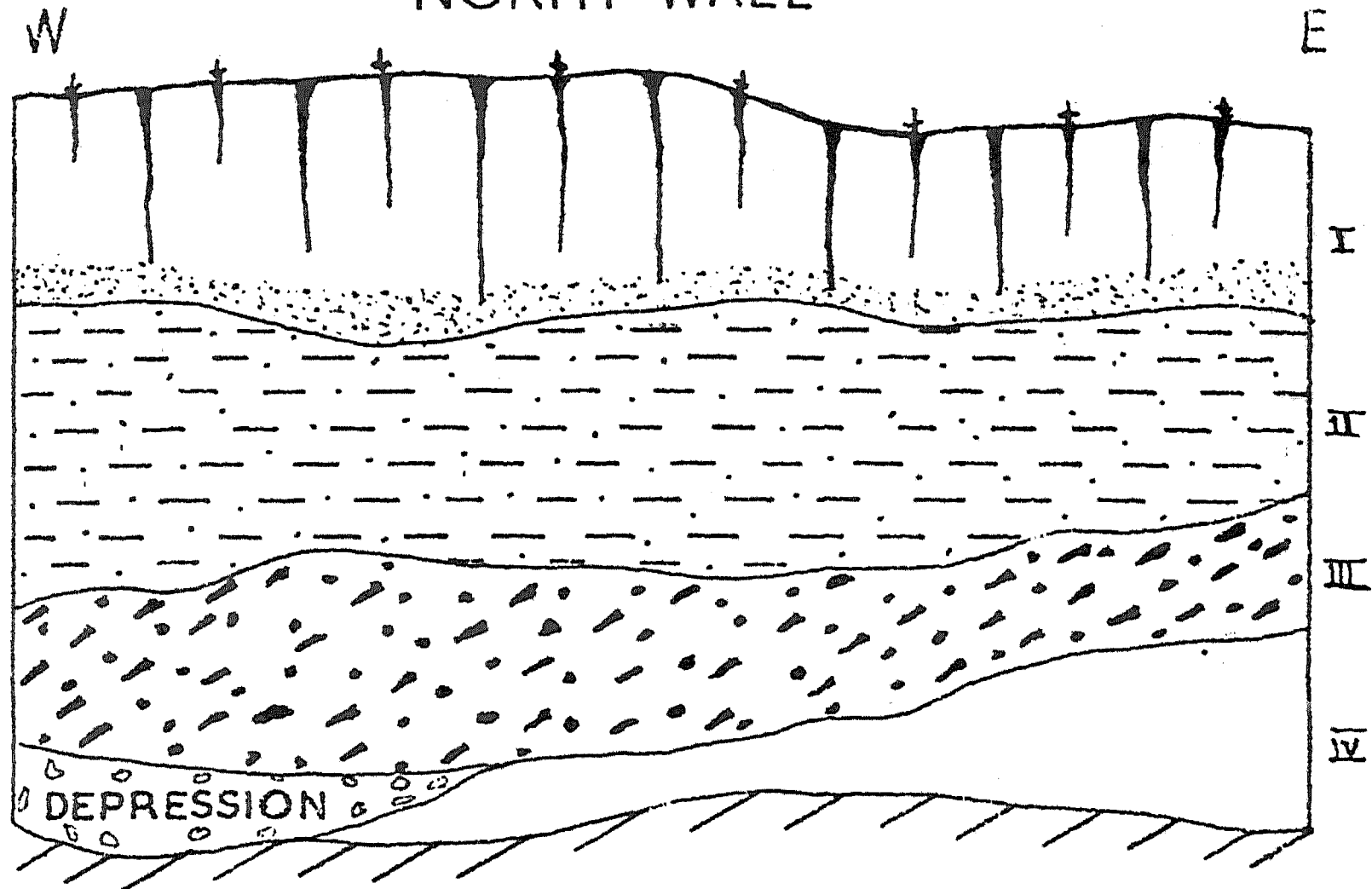


Fig.22

BONO MANSO
AREA 245
A.24.
NORTH WALL



- Dark brown soil with grass rootlets, charcoal and daub fragments
- Yellow sand with few charcoal flecks
- Red sandy soil with few charcoal
- Red sandy soil (natural sub soil)
- Depression with charcoal flecks

0 50cm

Fig.23

the centre. The general height above surrounding surface was 1.38 m. The area had been completely ploughed, rendering the top 15 cm or so very mixed.

Two test pits, each $1\frac{1}{2}$ m x $1\frac{1}{2}$ m were sunk here - one to the east and the other to the west end (E21 and A24 respectively). Pit E21 was extremely shallow revealing only 35 cm occupation deposit before the natural sub-soil was reached: the top dark, brown humus layer contained largely Phase II pottery. The layer below this was a yellow sandy soil with only a few Phase II sherds. This quickly gave way to a sterile pale red, sandy layer.

A similar stratigraphy was encountered in Pit A24 (fig. 23) but here there was one additional layer between the yellow sandy layer and the natural sub-soil (Plate VIII). This additional layer was reddish brown with a few charcoal specks. Whereas the two upper layers in E21 and A24 contained almost exclusively Phase II sherds, the additional layer in A24 possessed Phase I and probably imported sherds. Although in Layer I there were seven sherds (which belonged to one vessel) with mica in the paste, these were different in shape, size, and decoration from the typical Phase III sherds. In all probability therefore, the site may have witnessed two phases of occupation, the Phase III or Late phase being most probably absent here.

b) Architectural and other Features:

Area 139 - No features other than two postholes were found here. These were encountered at a depth of 1.08 m below surface, at 1.13 m interval in C12. These postholes perhaps represent a rectangular hut.

Area 171 - At a depth of 42 cm a circular hole, 12 cm in diameter and 8 cm deep was encountered 28 cm towards the south-western corner of the pit. This feature would certainly be a posthole.

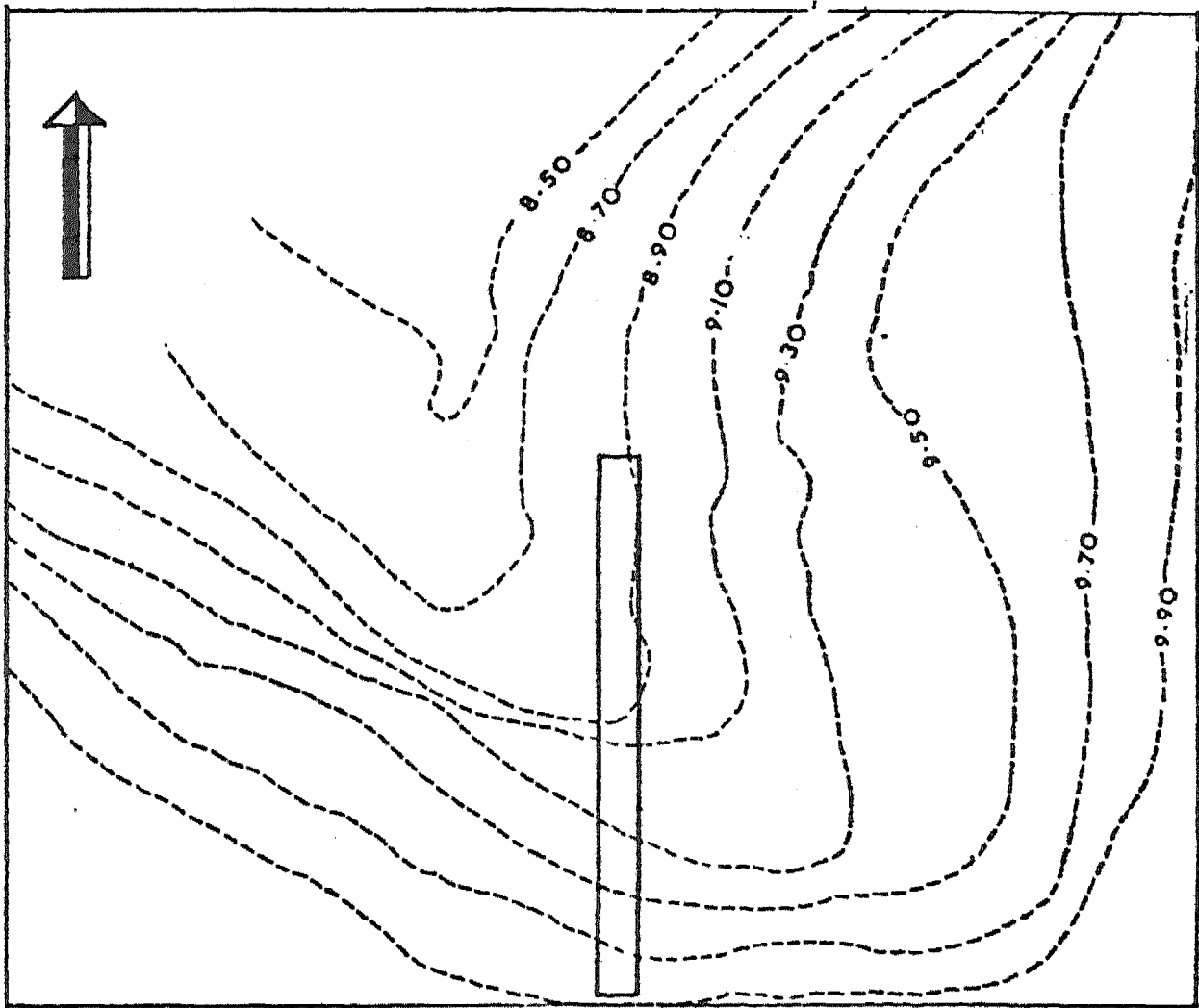
Area 245 - No features were encountered here.

3. OTHER EXCAVATED AREAS AT BONO MANSO

a) Area 41 - "Horses' pathway":

A trench 1x12 m was cut across a section of one of the pathways associated with horses in the local traditions (fig.24). In order to

BONO MANSO
AREA 41



0 2 metres

--- Contour interval 0.20m
□ Excavated area

Fig.24

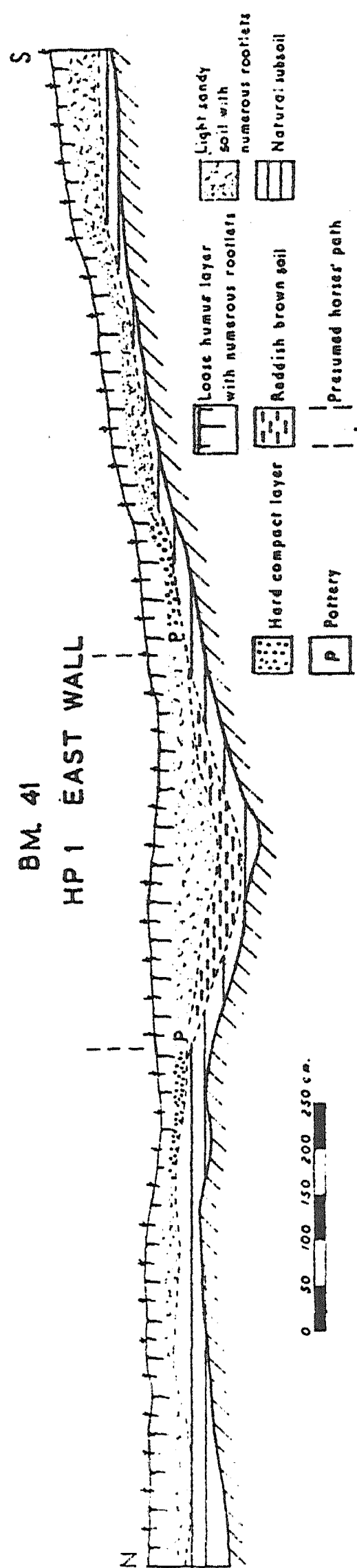


Fig.25

test whether the path (or ditch) had any trace of rampart, the trench included not only the path but also the banks. The top 20 cm of the whole trench revealed a loose humus layer with rootlets (fig. 25). Below this layer was a light brown, sandy soil of the same general thickness as Layer 1 but becoming twice as thick in the centre of the ditch itself. Towards the slopes of the ditch this layer thinned out and eventually merged into a hard, red compact layer, measuring 1.10 m long on either side of the ditch (fig. 25). In the centre of the ditch, and lying below the sandy soil, was a loose reddish-brown, sandy soil below which was the sticky, red clay sub-soil which was continuous in the whole trench.

The stratigraphic evidence suggests that the path was not deliberately dug, nor could any evidence suggest a defence system. It is more likely therefore that these features on the site were merely used as pathways to the streams nearby.

Even though there is the possibility that erosion has contributed to the widening and deepening of the pathways, and that deposition has also contributed to the soft, sandy layer in the ditch, it is tempting, in view of the ethnographic and archaeological evidence, to suggest that these ancient pathways were used by both hooved animals (possibly horses?) and pedestrians.

b) Abam Iron-smelting Site:

Lying approximately 100 m on either side of the eastern outskirts of Bono Manso site and the Abam stream is an area of roughly 85 x 60 m with a scatter of slag and tuyere fragments (fig. 26). Six main slag mounds were located within this area, ranging from 0.75 m and 1.2 m high and each about 25 m across. The site was exposed by the footpath leading to the Abam stream. Twenty five metres west of the site is a wide area of approximately 100 m square which is covered by laterite boulders used by contractors for gravelling roads. This site seemed to have been favourably placed because of its proximity not only to the raw material for the manufacture of iron but also to a stream which would provide water during the cooling process.

Two of the slag mounds which were separated from each other by one of the ancient pathways leading to the Abam stream were tested (fig. 26).

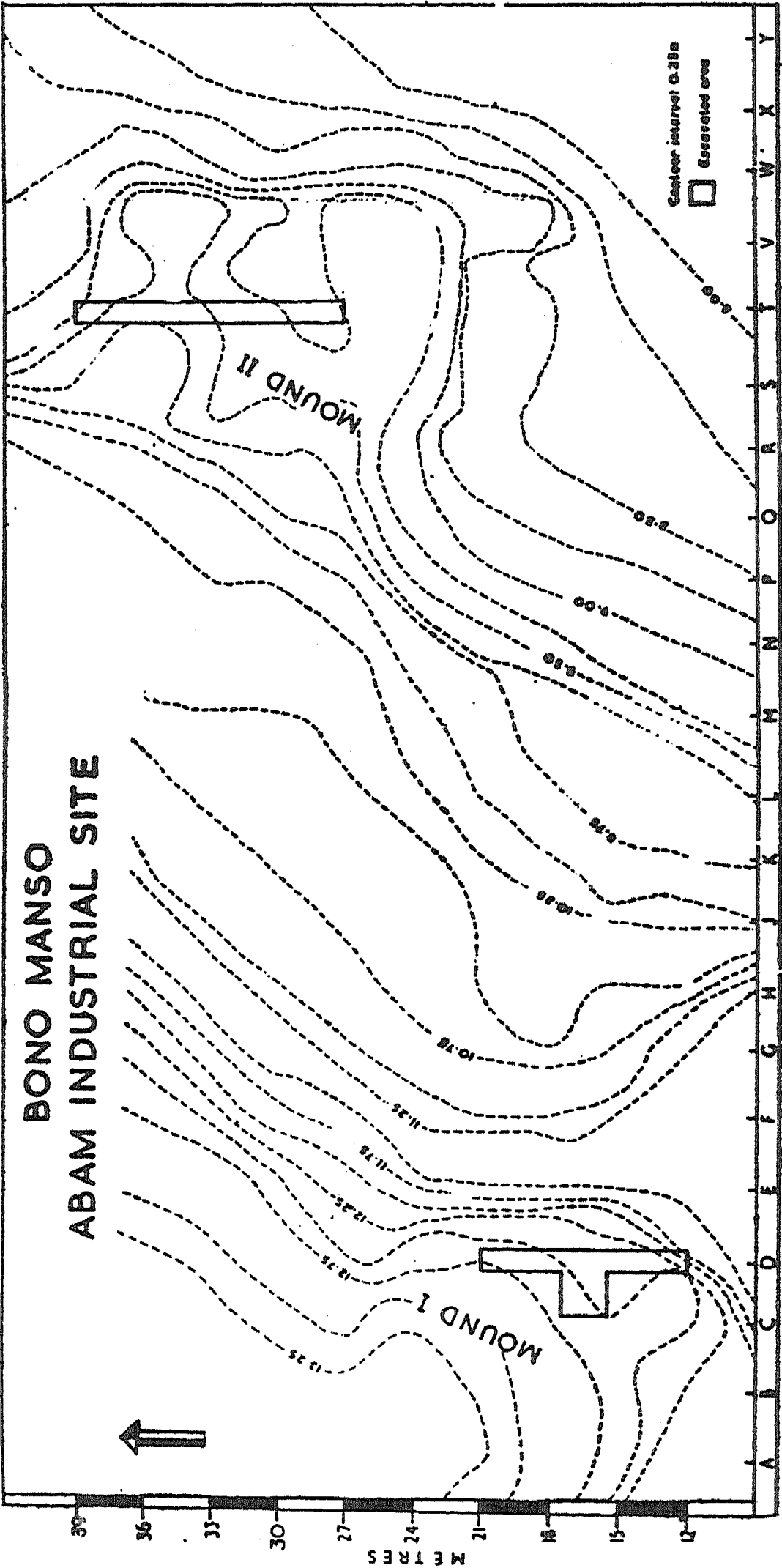


Fig.26

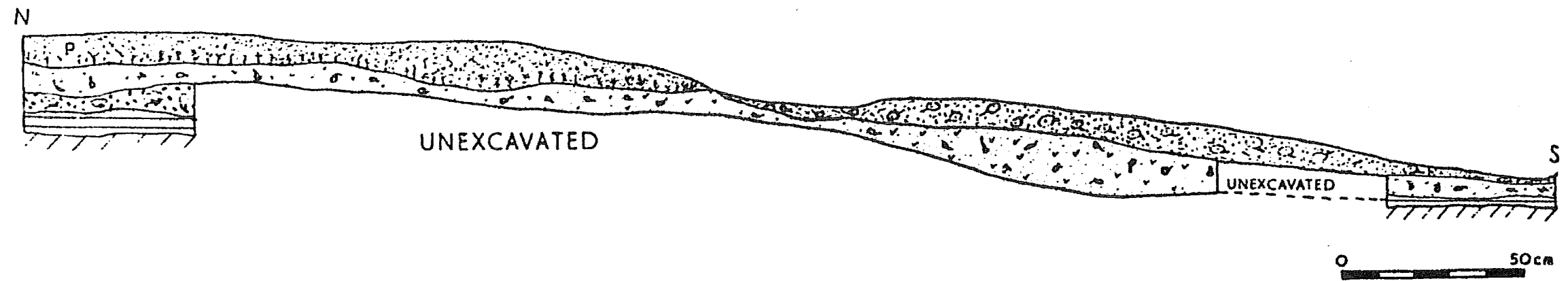
(i) Nature and Stratigraphy:

Mound 1 - A greater part of the mound had been eroded as a result of its location athwart the footpath leading to the Abam stream. A trench 1 m x 9 m, trending north-south was cut across the mound. In the course of the excavation it was discovered that the main activity area was in the middle of the trench. A 2 m extension was therefore made at right angles to the main trench, on the west side. The northern half of the trench which was a few metres away from the footpath revealed a dark brown humus layer with rootlets (fig. 27). This layer was absent in the southern half of the trench due largely to erosion and human use. Instead the southern half possessed a top layer, about 15 cm thick, which was dark brown in colour with slag rubble. Underlying these adjoining layers was a continuous band of light-brown soil with few daub pieces and slag fragments. This was followed by a sticky, reddish soil with numerous large sizes of slag, and daub fragments which may represent furnace wall and tuyere debris. This seems to represent the main activity layer of the mound. It was more clearly exposed in the centre of the trench, disappearing steadily in the southern part (fig. 27). It was this concentration which necessitated the extension, which revealed clearly a mass of daub, tuyere fragments, and large pieces of slag. Below this layer was the natural sub-soil.

An attempt was made to plot the position and orientation of all the cultural materials in the trench, and it was found that the bulk was aligned east-west directly opposite the daub mass (fig. 28). Associated with the concentration of tuyere and daub fragments were large and heavy slag pieces with marks reflecting the depressions used in tapping the slag at the bottom of the furnace. It was also in this general area that what looked like a furnace wall fragment or a slag plug was found. It seems therefore that this was close to the main area of activity if not the area itself (see Pole, 1975:18). Indeed it is difficult to attempt any reconstruction of the structure used in the smelting process without any direct evidence of a single in situ structural remnant, but the orientation of the tuyere fragments and the daub and slag concentration suggest that the furnace wall faced roughly eastwards.

BONO MANSO
ABAM INDUSTRIAL SITE
MOUND I
EAST WALL

Fig. 27



-  Humus layer (dark brown colour) with rootlets
-  Dark brown colour with slag rubble (eroded material?)
-  Light brown soil with few daub and few slag fragments
-  Red sticky soil with large slag and daub fragments
-  Red sticky soil (natural subsoil)
-  Pottery
-  Daub
-  Tuyere

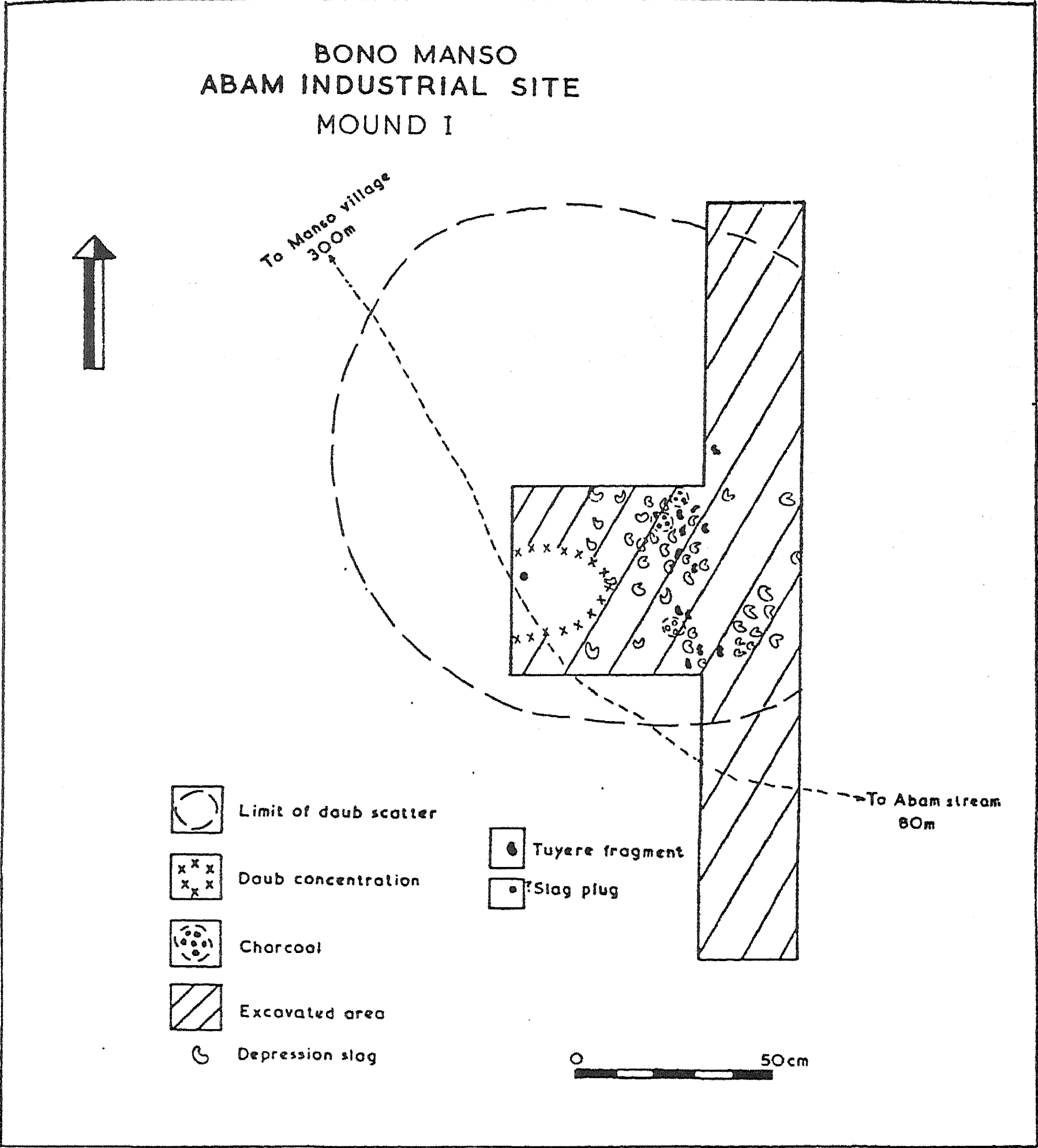


Fig.28

Mound II - This was a relatively undisturbed mound, located about 45 m north-west of Mound I. Covering an area of roughly 20 x 30 m, the mound measured 1.05 m above the surrounding land surface. A trench 11 m long by 1 m wide was cut from the crest of the mound towards the foot of it, in a north-south direction.

Being less disturbed than Mound I, Mound II revealed a continuous top humus layer varying in thickness from 10-30 cm (fig. 29). Unlike Mound I however, it was this same layer which contained the slag rubble. Below this rubble was a dark-brown layer with daub and tuyere fragments. This was underlain by another dark-brown layer which contained larger and heavier fragments of slag. Layer 4 was a concentration of daub and large fragments of slag. The daub pieces in this layer were more mottled than those in the upper layers. Below this was encountered the red sticky, natural sub-soil.

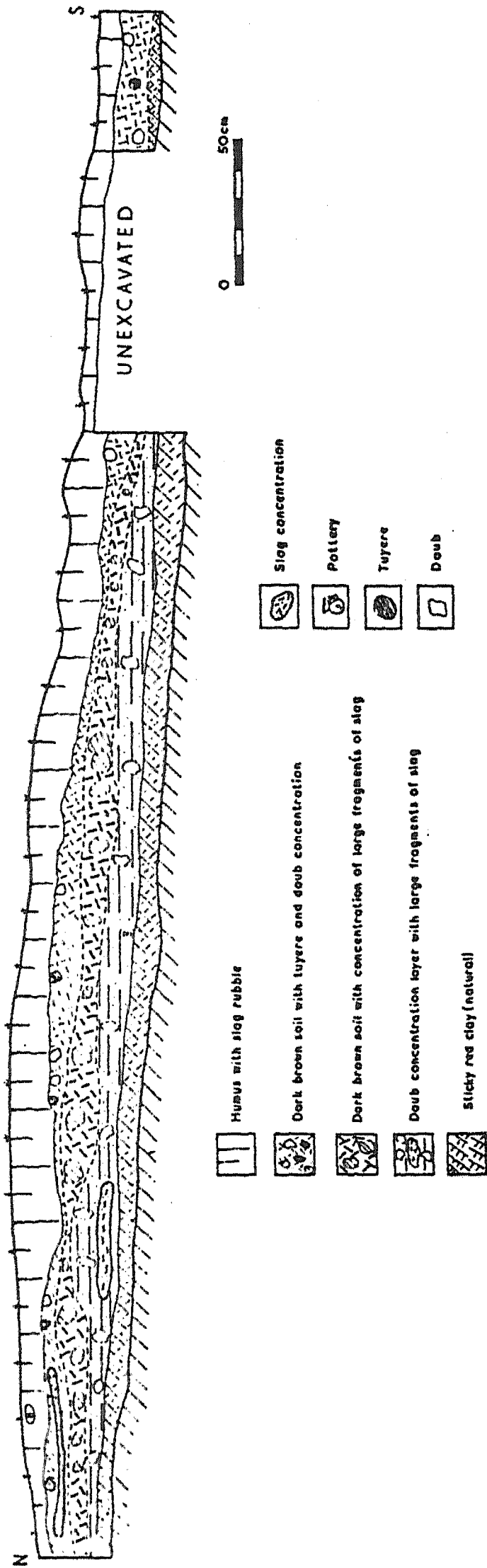
(ii) Pottery Sequence.

Two tiny sherds were recovered in the humus layer at a depth of 10 cm of Mound I. From paste, hardness and surface finish, these two sherds were closer to the Phase II ceramic type at Bono Manso than any ceramic class known to the writer in this area. Apart from these two sherds no other sherds were recovered here.

Over twenty sherds which were very similar to those recovered from Mound I were recovered on the surface of the summit at Mound II. Four more were recovered in the top humus layer in the trench at a depth of 8 cm. Although these sherds are similar to the Phase II ceramic class, they look more elaborate in their possession of banded grooves in the interior of the rims and are less well fired than the typical Phase II sherds. Such sherds with elaborate interior grooves were found in the Amuowi II excavation which the writer conducted in 1973 and which were in seventeenth to nineteenth century contexts (Effah-Gyamfi, 1974:202-224). From the context in which they were found, these sherds do not seem to be related to the factory site but perhaps they were used by farmers in the post-eighteenth century Manso village. It must be pointed out that this factory site is only 120 m east of the post-eighteenth century Manso village site, now abandoned (see fig. 5).

ABAM INDUSTRIAL SITE MOUND II
EAST WALL

Fig.29



At a depth of 75 cm, in the third layer of the trench in Mound II, eight sherds were found associated with slag and tuyere fragments. These five sherds had fabrics with fragments of white grog and laterite nodules, characteristic of many sherds of Begho ware (Crossland 1976b). Two out of the three remaining sherds were of the Phase I ceramic type, while the third belonged to the concrete textured (design-painted) type.

CHAPTER VI

NON-CERAMIC FINDS FROM BONO MANSO EXCAVATIONS

1. Metal:

(a) Iron. Fourteen iron artefacts were recovered from Bono Manso. In addition large quantities of slag were excavated from the Abam Industrial site mentioned above. Unfortunately as yet neither the iron artefacts nor the slag have been fully analysed.

Table 9 shows that four main types of iron artefacts were recovered from Bono Manso: arrowheads, iron bangles, knives, and spoons. In addition were sixteen pieces of unidentified iron objects.

(i) Arrowheads: Out of five arrowheads recovered, one is plain while the other four are barbed. Arrowheads are not used in the Bono Manso area today but they are still in use in the Northern and Upper regions of Ghana. In these two regions, while the barbed types are used in hunting animals, the plain ones are used on ceremonial occasions and are of purely aesthetic value (information from Mr. B.M. Murrey). The presence of arrowheads at Bono Manso may indicate that during its life time, the inhabitants of the capital had a similar tradition.

(ii) Iron bracelets: Only two pieces, which may belong to one object, were found. They are poorly beaten and they have an incision on both the outer and inner sides, perhaps representing a line of fusion of two iron fragments after hammering. The two pieces were in the Phase I depression of J24 at Area 159.

(iii) Knives: Five fragments of knives were discovered in Areas 104 and 159, from Phases II and III contexts. They are highly corroded and fragmentary except for two which are nearly whole with the socket ends attached.

(iv) Spoons: One complete spoon was recovered from Phase I of the J24 depression at Area 159. The tail which is half-broken must have been of a triangular shape and closely resembles the cuprous type described below. A similar spoon which had only the handle preserved was also recovered from Phase III occupation deposit, also at Area 159.

Table 9: Distribution of Non-Pottery Artifacts from
Bono Manso Excavations, 1973-1976

MAIN CLASS	ARTIFACT TYPE	QUANTITY	AREA OF EXCAVATION	CONTEXT (Phase)	REMARKS
IRON	Arrowheads	2	104	Ph.III	Both barbed.
		2	159	Ph.III	1 barbed, the other plain.
		1	245	Ph.II	Barbed.
	Iron bracelets	2	159	Ph.I (J24 depression)	May belong to one object.
	Knives	3	104	Ph.III	Fragments.
		1	159	Ph.III	Whole piece.
		1	159	Ph.II	Whole piece.
	Spoon	1	159	Ph.III	Only handle preserved.
		1	159	Ph.I	Nearly whole piece from J24 depression.
COPPER/ BRASS	Spoon	1	104	Ph.III	Nearly whole piece.
		1	104	Ph.III	Fragment (one-third of whole size.
	Knife	1	104	Ph.III	Fragment of socket.
	Needles	2	104	Ph.III	Full pieces.
		2	159	Ph.II	Without "eyes"; both found in depression.

Table 9 contd.

MAIN CLASS	ARTIFACT	QUANTITY	AREA OF EXCAVA TION	CONTEXT (Phase)	REMARKS
COPPER/ BRASS	Bracelets	1	159	Ph.II	Twisted out of use; found in depression.
		1	104	Ph.II	Complete specimen.
	Rings	1	104	Ph.III	Complete specimen.
		1	104	Ph.III	Fragment (one-third of full size.)
	Brass scraps	1	104	Ph.III	-
		1	159	Ph.II	-
		1	159	Ph.I (J24 depression	Associated with crucible fragments.
	Bangles	5	104	4 from Ph.III; 1 from Ph.II	-
		3	159	Ph.III	-
	Carved bracelets	2	60	1 Ph.III 1 Ph.II	- -
		2	104	Ph.III	
BEADS	Cup	1	104	Ph.III	Fragment.
	Stone bead	1	104	Ph.III	Made from quartz.
	Bone bead	1	104	Ph.III	Of triangular shape.
	Shell beads	2	159	Ph.I	J24 depression.
		1	104	Ph.III	-

Table 9 contd.

MAIN CLASS	ARTIFACT TYPE	QUANTITY	AREA OF EXCAVATION	CONTEXT (Phase)	REMARKS	
BEADS	Glass beads a) long cylinder	6	104	Ph. III	-	
		8	159	Ph. II	Associated with burial in Trench I.	
		1	159	Ph. I	Found in J24 depression.	
	b) standard cylinder	2	104	Ph. III	-	
		4	159	Ph. II	Associated with burial in Trench I.	
	c) standard barrel	2	104	Ph. III	-	
		3	159	Ph. III	-	
	STONE	Upper grindstones	4	60	Ph. III	-
			2		Ph. II	-
			10	104	Ph. III	-
		6		Ph. II	-	
		1		Ph. I	-	
		10		Ph. III	-	
		10	159	Ph. II	-	
		29		Ph. I	Mainly from J24 depression.	
		2	245	Ph. II	-	
Stone cubes (gold weights?)		1	60	Ph. I	-	
		1	139	Ph. I	-	
Rubbing stones		3	104	Ph. I	-	
		2	159	Ph. III	-	
		2	104	Ph. II	Probably for sharpening knives.	

Table 9 contd.

MAIN CLASS	ARTIFACT TYPE	QUANTITY	AREA OF EXCAVA- TION	CONTEXT (Phase)	REMARKS
STONE	Propping stones	1	139	Ph. I	-
		2	104	Ph. III	-
	Polished stone axe	1	159	Ph. I	-

(b) Cuprous Objects.

A total of fourteen cuprous artifacts was recovered. Of these artifacts only 1 scrap came from a Phase I deposit. The artifacts may be described under the following sub-divisions ,

(i) Spoons: Two spoons were found in the Area 104 excavation. They both have short, regular incisions on the inner side of the handle. The one which is a nearly whole piece has a similar triangular tail as the iron spoon described above. Two similar spoons and a small brass pot were discovered by the workmen of the Takyiman Secondary School (which is located on the Old Takyiman site) associated with a burial when they were digging a pit latrine. Test excavations at this site show that it is contemporary or slightly later than the Phase III occupation at Bono Manso. Mr. T.F. Garrard sees a close similarity of the shapes of the tails of the spoons discovered in the Bono Manso area, with the European silver spoons with the characteristic "rat's tail". He believes that spoons with this distinctive trait ceased in Europe by 1730 A.D.. He would also assign the decorations found on the excavated spoons to be early period in his classification (personal communication).

(ii) Knife: A fragment of what looks like the socket end of a knife was discovered in a Phase III context at Area 104. It is difficult, in view of its size, to know the shape of the full object.

(iii) Needles: Four copper needles were discovered, two each in Phases II and III of Areas 159 and 104 respectively. While the two specimens from Area 104 were complete, those in Area 159 were not only without the "eyes" but also they were found in the depression which has been explained above as representing a rubbish dump. These two observations suggest that the specimens from Area 159 had been discarded by the inhabitants of the house while

those in Area 104 were in use at the time of the occupation.

(iv) Bracelets: Two bracelets were found, from Area 104 and the other in Area 159, both in Phase II contexts. As with the needles, the bracelet from Area 159 was twisted off and was found in the M27 depression, suggesting that it was also no longer in use. This particular object has dot impressions on the whole outer part while the full specimen from Area 104 is undecorated.

(v) Rings: Two rings were found in Area 104 in a Phase III context. One is complete while the other is a fragment.

(vi) Scraps: Three tiny pieces of brass scraps were found, one from Area 104 in a Phase III context and the other two from Area 159. Of the two from the latter area, one came from a Phase II context while the other was associated with the Phase I depression in J24 described in an earlier chapter. This last one is important because it was found together with fragments of crucibles.

2. Ivory:

Three main types of ivory objects may be distinguished:

(a) Ivory bangles. A total of 18 pieces was found belonging to 10 separate bangles. They were distributed fairly evenly among Areas 60, 104 and 159. Although two of the bangles were each found in a Phase II context at Areas 60 and 159, the bulk of them came from the Phase III deposits. They are carefully worked into smooth circular shapes with a range of 45 mm to 55 mm in internal diameter. They are now very fragile. No complete specimen was found, though most of them were more than half the original objects.

As noted above, most of them are of the same size as the copper bracelets, and, if indeed they were bracelets, they could only have been worn by either teenagers or slightly built adults. Similar ivory bangles have been found in antique shops at Bida in Nigeria by the writer. Shaw also excavated some of these at Dawu (Shaw, 1961 plate XI).

(b) Carved ivory bracelets. Two different pieces, though with identical decorations, were discovered in a Phase III context at Area 104. In profile they seem to have a cylindrical appearance. An elaborate carving of circular incisions enclosing a circle with dot impressions is found at the mid-sections of the two pieces. A similar object has been found at Asebu (Nunoo, 1957, fig. 3a, 14). Ivory objects with similar decorations have also been excavated at Dawu (Shaw, 1961, plate XII, no. 36).

(c) Cup. A fragment of ivory which in profile looks like part of a cup was also discovered in a Phase III deposit at Area 104. It has no decoration, though it is carefully smoothed.

3. Beads:

A total of 31 beads was recovered from Areas 104 and 159; only one bead came from Area 60. Curiously no bead was recovered from the Phase I areas of 139 and 171. Table 9 shows the distribution of the excavated beads. Full mineralogical analysis has not yet been done of the beads. However a casual identification by the writer with assistance from Dr. Van Landerwijk of the Department of Geology, University of Ghana, Legon has made possible the following classification. Although the literature by Beck on classification of beads (Beck, 1928) was not available to the writer, the classification below is indirectly based on Beck. For it is based on those of Shaw (1961), Lamb and York (1972) and Connah (1975:167-178), all of which were largely based on Beck's classification. For another method of classification, see Chittick, 1974:460-495).

(a) Stone beads (plate 26, no.5): Only one specimen was excavated. It is made of quartz and is disc-shaped with an outer bore diameter of 3 mm and an inner bore diameter of 1.5 mm. A hoard of 589 beads of similar shape, size and material was shown to the writer at Buoyem when it was dug out by a palm-wine tapper. No known abandoned settlement was nearby. However the place is just under 8 km from Bono Manso. Oral traditions from Buoyem claim that the ancestors of modern Buoyem village occupied the area only during the Asante invasion of the Bono state. It was here that the sika puduo (golden stool)

of the Bono state which is claimed as one of the most ancient regalia, brought from the hole of Amuowi, was hidden from the Asante. It is possible therefore that the hoard of beads dug out belonged to an inhabitant at Bono Manso, who in the wake of the invasion, hid it there.

(b) Bone or ivory bead: Only one specimen was encountered. It is triangular in shape, and like the quartz bead, it is bored from both sides, in its mid-section. Outer bore diameter is 2 mm and the inner bore diameter is 1 mm.

(c) Bone or shell beads: Three tiny short cylinder beads which may be of shell were also found. Their identification is difficult but Dr. Van Landerwijk is positive that they are not glass beads. Two of these were found in the Phase I deposit in the J24 depression at Area 159. The other one was in a Phase III deposit in Area 104. They are remarkably consistent in size, being 4 mm across with outer and inner bore diameter at 1 mm. An old woman at Takyiman, nana Afua Kuruwa who is a specialist in ancient beads, produced an identical type in her collections and identified it as mfufua in Twi.

(d) Glass beads: All the remaining 26 beads were made of glass. Three main types can be distinguished:

- i. Long cylinder.
- ii. Standard cylinder.
- iii. Standard barrel.

(i) Long cylinder (15 specimens): This is the most frequent of the beads at Bono Manso. Average bore diameter is 4 mm, and average length measures 10 mm. Made of yellow glass, 14 of the specimens are red monochrome while 1 has black stripes on red. Seven of these were found on the neck of the burial at Area 159 in Trench 1.

(ii) Standard cylinder (6 specimens): Four of these were among the red beads found on the neck of the burial at Area 159 in Trench 1. They are reddish-brown with black and white stripes, though one was grey with blue stripes. Bore diameter averages 2 mm with an average length of 5 mm. Two of them seem

to have been drawn and twisted at the same time, while the rest were only drawn.

(iii) Standard barrel (5 specimens): These have a very slight convexity in shape and seem to have been wire wound. Bore diameter averages 2 mm and average length is 7 mm. They are mainly monochrome of either greys or blues but one has a set of black twisted trails or "eyes".

Lamb and York have cautioned on the use of trade-beads at type-fossils in Ghanaian archaeology (1972). For not only are they time-transgressive but also they can be imitated by both European and African bead manufacturers. It is therefore difficult to know for certain whether a bead is local or imported.

On the whole the evidence here suggests that both local and imported beads were in use during the Phases II and III occupations at the capital.

4. Stone Artifacts:

Stone artifacts were common. Over 85 per cent of these were made of sandstone which is very common in this area. Six sub-types of stone artifacts may be distinguished from the excavations, upper grindstones, stone cubes, rubbing stones, sharpeners, proppers and a polished stone axe.

(a) Upper grindstones: 74 of these were found and table 9 shows their distribution. In general they are either circular or elongated, (though a few have amorphous shapes) and they have flat, smooth surfaces mostly on only one side but in a few cases on both sides. In twelve cases, one or two dimples are found on the working surface, suggesting that they were used both to crack nuts and for grinding. Except two which were of quartz, the rest were made of sandstone. As will be seen from table 9, upper grindstones are found throughout the three phases of occupation though they are more common in the two upper occupations. It is of some interest to note that upper grindstones were not found in the single occupation areas of 139 and 171.

(b) Stone cubes: Two pieces of sandstone, cuboid in shape and weighing 22.9 and 12.3 grams respectively, were excavated from Areas 139 and 60 both in Phase I contexts. Three horizontal grooves are found around each of them. Their purpose is difficult to determine. Garrard has suggested that the stone and pottery discs found in archaeological contexts, in Ghana, may be rudimentary forms of gold-weights (Garrard, 1975). In the 1973 excavation at Amuowi I, thirteen pottery and one stone disc were discovered. Ten of these fell into the Islamic weight standard, two did not correspond with the Islamic standard and two were considered doubtful Islamic weights (Effah-Gyamfi, 1974, and Garrard, personal communication). Similar pottery discs have also been found at Begho, New Buipe and Dawu and have since been weighed by Garrard (Garrard, 1975).

No such cubes as found at Bono Manso have been excavated elsewhere in Ghana and one must be cautious in interpreting them as gold-weights, more especially since their weights do not seem to fall into any weight system (Garrard, personal communication). However, from a photograph at the Department of Archaeology Museum, University of Ghana, Legon, which shows a large collection of brass gold-weights from the Ivory Coast, the writer has noticed a brass gold-weight of identical shape and decoration.

(c) Rubbing stones: Six of these were excavated, none of which came from a Phase I deposit (Table 9). They are mainly roundish and elongated and are smooth on all sides though one side tends to be smoother, due perhaps to more frequent use, than the other side. They are all made of sandstone.

(d) Sharpening stones: Five of these were excavated. They have smooth working surfaces which, through constant use, have turned into shallow U-shaped depressions. Their under-surfaces are chipped and pointed, probably to facilitate planting in the ground for use. Similar sandstone sharpeners are still found among farming communities in this area. They are mostly located either at the corner of the courtyard of houses or just behind houses and one of these may serve more than ten persons. Each morning, before going to farm, cutlasses are sharpened on these stones. Knives may be

sharpened on smaller ones of the same form. In view of their relative sizes, those from Area 104 may be knife sharpeners.

(e) Propping stones: These are non-modified stones which may not be considered artifacts but they are covered with soot and smoke and are mostly flat. In the Bono Manso area flat stones are used by women to prop their cooking pots when on the fire and these stones may have been used for the same purpose.

(f) Polished stone axe: One polished stone axe was found in a Phase I deposit at Area 159. It is a green stone (probably schist) and may not have come from the immediate area of Bono Manso; almost all the polished stone axes found at Gyamma were of mudstone. This single artifact could have been a stray find and would either have been kept for its aesthetic or ritual value.

5. Bones:

A large collection of bones was made from the Bono Manso excavations. In all 329 separate pieces were recovered. However over 95 per cent of these were either too fragmentary or undiagnostic to be of any use. Dr. Peter Grubb of the Department of Zoology, University of Ghana, kindly looked at the bones and identified the following animals from among them (Table 10). In addition some of the bones were shown to an eminent hunter (now retired), Opanyin Kwasi Fah, who was able to identify them.

Table 10: Identification of Bones from Bono Manso Excavations, 1973-1976.

ENGLISH NAME	ZOOLOGICAL EQUIVALENT	AREA OF EXCAVA- TION	CONTEXT	REMARKS
Chicken	<u>Gallus gallus</u>	159	Phase II	Identified by Grubb.
?Dog	<u>Canis familiaris</u>	159	Phase II	Identified by <u>Opanyin Kwasi Fah</u> as jackal.

Table 10 contd.

ENGLISH NAME	ZOOLOGICAL EQUIVALENT	AREA OF EXCAVA- TION	CONTEXT	REMARKS
Porcupine	<u>Hystrix</u> <u>cristata</u>	60	Phase III	Identified by Grubb.
Grass-cutter	<u>Thryonomys</u> <u>swinderianus</u>	60	Phase II	Identified by Grubb and confirmed by <u>Opanyin Kwasi Fah.</u>
		159	Phase I	
Potto	<u>Perodicticus</u> <u>potto</u>	159	Ph.I (J24 depression)	Identified by Grubb and confirmed by <u>Opanyin Kwasi Fah.</u>
Snail	<u>Achatina</u> <u>achatina</u>	60	Phase II	-ditto-
?Roan antelope	<u>Hippotraqus</u> <u>equinus</u>	60	Phase III	Identified by Grubb.
Bush pig	<u>Potamochoerus</u> <u>borcus</u>	159	Phase I	Identified by Grubb and confirmed by <u>Opanyin Kwasi Fah.</u>
Goat	<u>Capra hircus</u>	60	Phase II	Identified by Grubb.
		159	Phase II	

It is of interest to note that even though a few bones were recovered from the Phase I deposits, over 80 per cent of the total bones came from the two upper phases of occupation. It is also worth remarking that the animals identified are still found in the area, suggesting a similar environment during the time of Bono Manso's existence.

6. Summary

From the above analysis one thing that is clear is that whereas Phases II and III had a greater quantity of artifacts other than pottery, the Phase I deposits, especially the single occupation ones, were almost devoid of the non-pottery artifacts. Indeed artifacts such as ivory, grindstones, beads and cuprous objects are not present at all in the Phase I occupation sectors at Bono Manso. It would be rash to suggest that such an absence indicates that the artifacts mentioned above were not in use in the Phase I occupation, especially when one considers the fact that in such an area with acidic soil many (except the grindstones) would have perished with age. Moreover, the areal excavations have not been very extensive. On present evidence alone, one may say that artifacts other than pottery became widely popular at the capital site in Phases II and III occupations, a phenomenon which may not only reflect general increase in wealth but also an increase in population. It is worth noting that even though it contained mainly Phase I pottery, the depression in J24 at Area 159 produced a large number of grindstones, crucibles, a glass bead, iron and brass scrap (Table 9). As has been shown above, this particular depression contained more evolved materials than those typical of Phase I occupation. This observation seems to strengthen the suggestion made in the previous chapter that the J24 depression represents an advanced stage in the Phase I occupation at Bono Manso in which more elaborate developments began and continued through the Phase II occupation into the third Phase when it was abandoned.

CHAPTER VII

CERAMIC FINDS FROM BONO MANSO EXCAVATIONS

This chapter is divided into two sections. Section A describes the pottery vessels while the second part deals with ceramic finds other than vessels. Section B is sub-divided into two, one dealing with smoking pipes while the other deals with spindle whorls. All the finds are described in terms of their local and regional contexts.

SECTION A: POTTERY

1. Introduction:

As usual with Iron Age sites, pottery formed the bulk of the finds excavated from Bono Manso. Apart from the Abam iron-smelting site which produced mainly slag and tuyere fragments, pottery formed about 99% of the finds from the other areas excavated at Bono Manso. Virtually all the pottery was in the form of sherds. A total of 16,888 sherds were analysed. Sherds from Area 41 and the Abam industrial site were excluded from this analysis owing to their very small quantity (53 and 10 respectively). One major problem concerning the study of an urban site is the sample size of the cultural materials excavated. The writer believes that within limits, the sampled areas exhibit a representative picture of the material culture of the people who once lived at Bono Manso.

Analysis of pottery from Bono Manso began in 1973 and the preliminary results of two out of the five units (E18 and E24) excavated at Area 104 were used in writing an M.A. thesis (Effah-Gyamfi 1974, 225-270). Since then more detailed analyses have been made not only for all the units excavated in 1973 at Area 104, but also for the other areas later excavated.

For this reason, it must be emphasized that the present results will differ from what is contained in the 1973 report. One such difference is in the designation of the main wares. In the 1973 excavation, wares were designated by their relative frequency. Thus Bono ware I was used for distinctive local sherds which formed the majority of all the sherds analysed; Bono ware II for the local ware having a smaller quantity of sherds than Bono ware I, and so on (Effah-Gyamfi 1974:226). In this report it is proposed to drop these designations altogether in view of new and fairly detailed information about pottery from the whole Bono Manso site.

In this chapter it is proposed not only to describe the main wares at the site but also to use the available evidence in making an intrasite comparison to find spatial or temporal differences. At the same time the evidence will be matched against those of neighbouring sites in the Bono Manso area in an attempt to find evidence for cultural and temporal links with the site of the capital. Finally the results will be compared with key sites in Ghana, particularly Ahwene Koko, Begho and New Buipe.

Although the different decorative techniques and motifs will be dealt with in the description of the ceramic groups below, it is relevant to point out that the following broad groups of decoration were recognised at Bono Manso:

Rouletting

Grooving

Stamping

Notching or scalloping

Incision.

Rouletting: Four main types of roulette decorations have been distinguished. The first type has been designated medium cord roulette and this

shows inclined furrows which may have resulted from rolling a cord-like object on the surface of the vessel in its leather-hard stage.

This technique is distinguished from the second type which shows deeper and thinner furrows, the result of using a finer cord-like object and applying it all over the body of the vessel. For this reason I propose to call it fine cord roulette or Begho style since it is characteristic of the Begho area, while the first type is typical of Phase II ware at Bono Manso. The third type of rouletting results from the carving of an object and then rolling it on the surface of the pottery. This is referred to as carved roulette which is mostly in a zig-zag pattern. The fourth type may have resulted from the rolling of a corn-cob on the surface of the pottery, producing some irregular moon-shaped incisions on the surface of the vessel. Although the term corn-cob roulette is retained for this type on some of the sherds this decoration is faint and does not possess the normal lunate-shaped impressions characteristic of corn-cobs. This may be due to the rate of wear of the particular cob, though one cannot rule out the use of another object of similar shape. Corn-cob rouletting is still practised among the Mo potters in the Begho area.

Grooving: Although grooving may be a characteristic decoration of a particular ceramic class, it is the commonest among all the ceramic classes, employed either singly or in combination with other typical decorations. The decoration results from the use of the end of a pointed object against the surface of the pottery which produces a groove or grooves U-shaped in cross-section. Grooving may be single or banded and

may take different motifs.

Stamping: Five types of stamping may be distinguished among the pottery decorations at Bono Manso. The first is comb-stamping which, as its name suggests, may have resulted from the use of a multi-toothed tool to impress on the pottery, producing a continuous row of impressions which have either a square outline or are triangular. The comb-stamp decorations at Bono Manso may be in single or multiple rows and are mostly horizontal.

The second type is herring-bone stamping and, as its name implies, may have been produced by the use of an object whose pattern is like a herring bone, which was impressed on the surface of the vessel, producing a row or rows of V-shaped designs. This type is extremely rare and it is not found on any of the local wares.

The third type is designated wavy-line stamping and this probably involves the use of a serpentine-shaped object which when impressed on the surface produces a continuous wavy-line design. This third type is common with Begho ware as will be shown below.

The fourth type of stamping found at Bono Manso is characteristic of the Silima (Design-painted) ware and it is referred to as hollow-stalk stamping. With this type, a hollow-ended tool like that of a reed or a bone was stamped on the surface of the vessel, mostly in an irregular fashion. It is mostly found in a combination with another decoration or decorations.

This third type of stamping found at Bono Manso is designated cuneiform stamping for want of a better term. This is similar in shape to comb-stamping, except that the rows produced do not suggest a multi-toothed tool but probably by the use of a single-toothed object like the edge of a calabash which produces triangular-shaped designs.

Notching and Scalloping: These are two different techniques, each of which is characteristically restricted to the lips of Phase I vessels and occasionally Phase II vessels and are therefore considered together here. These decorative techniques are essentially regular cuts on the lips of the vessels which produce either V-shaped (for notching) or U-shaped cross-sections (for scalloping).

Incision: This technique is similar to grooving, except that the tool used in incision is sharp and produces deep, narrower cuts which are V-shaped in cross-section.

Stabs: This technique is similar to incision, the main difference being that whereas incision usually involves a continuous deep cut, stabs are a series of short, usually inclined cuts on the surface.

The above techniques may be found either singly or in two or more combinations, in which case they have been referred to as compound decorations.

2. Ware Identification:

Pottery from each area of excavation was analyzed separately, but the combined evidence revealed that seven main wares could be distinguished at Bono Manso site. Of these seven wares, three proved the most frequent in each phase of occupation as explained in Chapter V, and are therefore for convenience labelled after the particular phase where each predominates. The rest of the wares are those that have been recovered in considerable quantities in neighbouring areas and which are considered foreign to the Bono Manso area. The main wares are:

- (a) Phase I ware
- (b) Phase II ware

- (c) Phase III ware
- (d) Begho ware
- (e) Silima ware ("Design-painted" ware)
- (f) Mica-coated or imported micaceous ware
- (g) Ahwene ware
- (h) Miscellaneous.

Except Ahwene ware, at least two specimens each of the above wares were submitted for mineralogical analysis in 1973 (Effah-Gyamfi: 1974, 291). Even though reference will be made to the report of 1973 in this analysis where necessary, major reliance will be placed on the writer's own "pottery sense" (Shepard: 1965, 97) acquired through four years of constant classification and re-classification of the pottery from Bono Manso. This reliance stems from the fact that not only is the sample size mineralogically analyzed unrepresentative, but also owing to the virtual uniformity of the geological structure of Ghana (see Dickson & Benneh: 1970, 15), much less information is likely to be obtained in such analyses with regard to distinguishing different culture areas.

a. Phase I ware:

(i) Fabric - This ware has a fine, sandy texture. The exterior is well oxidised while the interior is shadowed and about 50 per cent of the sherds in this ware have the outer surface with a sparse scattering of small mica flakes. Mineralogical analysis shows that mica is probably the major constituent of the paste, though visual identification of all the sherds reveals that about 50 per cent of them do not possess mica. Also from visual identification, the bulk of sherds in this class do not possess any amount of quartz or laterite fragments. The ware is slightly porous. Colours

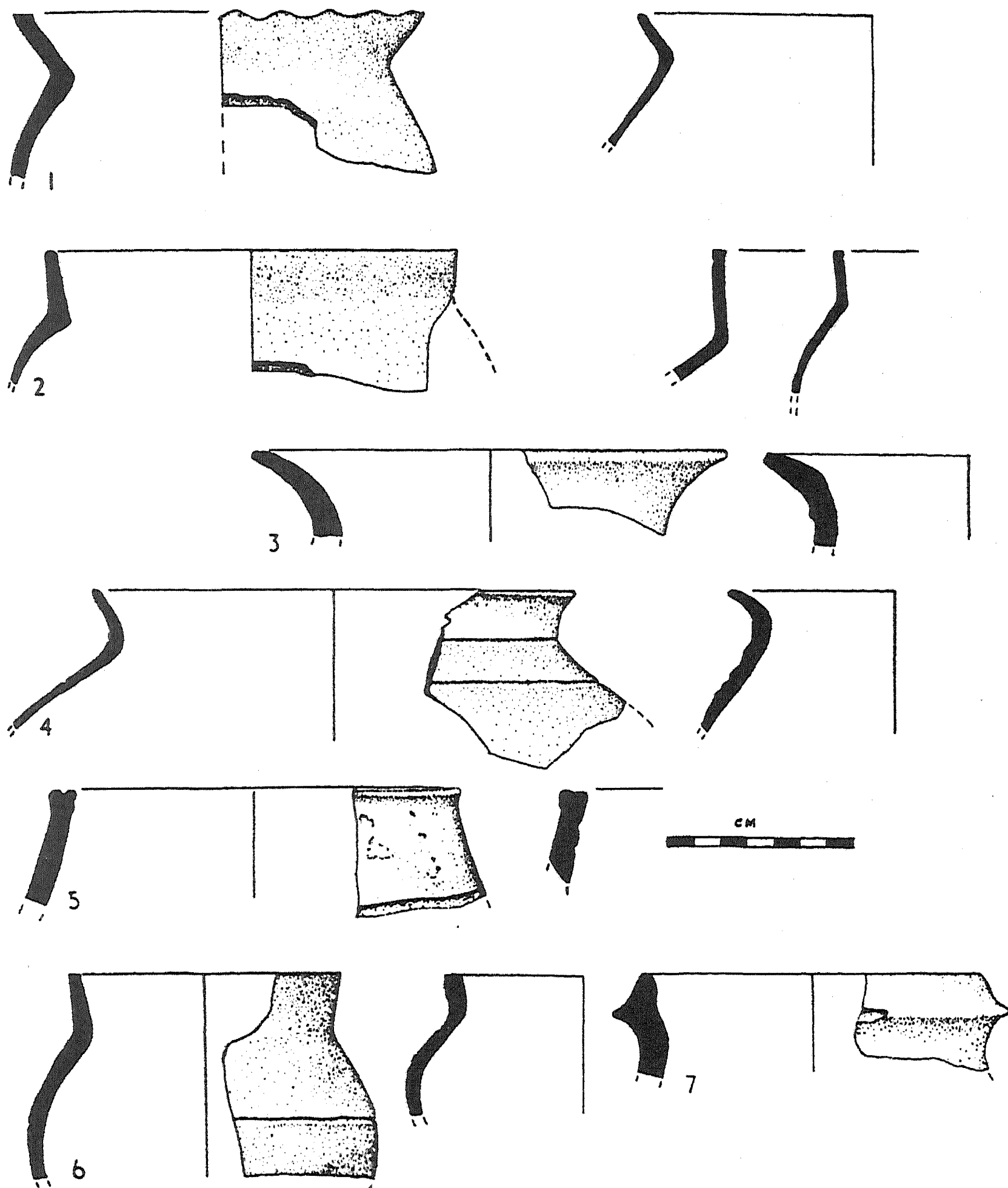


Fig.30a. Vessel Forms of Phase I ware

range from buff, through light-brown to red.

(ii) Surface finish - Sherds in this class are predominantly hand-smoothed, that is, they have not been burnished. In a few cases clay bits may be found sticking out on the surface. Of the total 5,301 sherds analysed from all the six areas of the site, 4,536 (85 per cent) were handsmoothed. Red slipping is almost totally absent on this ware and burnishing is not common (14.1 per cent). Even though handsmoothing preponderates, it is significant that the inner surfaces of many of the sherds are more evenly smoothed, though not burnished, a feature which may be more functional than aesthetic.

Fifty-five sherds which were found mainly at Area 159 show an important deviation from the normal surface finish of this ware. Not only do they have extremely good burnishing but also they are carefully smudged.

(iii) Decoration - Of the total 5,301 sherds belonging to Phase I ware, only 717 (13.5 per cent) were decorated. The major decorative technique is grooving. Generally the grooves are executed in horizontal motifs, but they are short, often discontinuous and remarkably irregular in their execution. Other decorations are simple incision, notching or scalloping and fine cord roulette (Begho type) in that order of popularity. Notching is restricted to hearth pots which usually show clay laminations, being the result of regular coating of hearth pots with red clay, a morning chore of women in this area (see also Bellis: 1972). What is clear is that multiple or compound decorations characteristic of Phase II ware, and stamping are rare on this ware. There is also a tendency for the decoration to be located either on the neck or more commonly just below the neck.

(iv) Vessel forms (Figs. 30a-30c) - 130 rim sherds were analysed which revealed 19 main vessel forms. These are summarised below.

Form 1 (15 specimens): This is a necked pot with a sharply everted rim whose outer and inner profiles are angular. The vessel is characteristically handsmoothed. Nine out of the 15 specimens had notched rims, five of which bore clay laminations suggesting their use as hearth pots (fig. 30a, no.1). The other 6 sherds without notching have squared lips. Only one of these is decorated with parallel, discontinuous grooves. This form is common to all the 6 areas excavated and is restricted to the phase I occupation.

Form 2 (23 specimens): This is a necked pot with a nearly straight rim. Both profiles of the rim-neck joint are angular but the inner one tends to be sharper (fig. 30a, no.2). The rim may be short in relation to the body. Thirteen out of the 23 rim sherds show the characteristic porous and sandy texture of this ware. They are also handsmoothed with three cases having the usual horizontal grooves on the bodies. The lips are all squared. The form is common to Areas 60, 104, 139, and 171; none came from Area 245. Even though the rim sherds found in Area 159 are of the same form, they are heavier and much cruder with brush marks in the interior of the vessel. Four of the 10 rim sherds found in Area 159 were notched. All the specimens from all the areas were in phase I contexts.

Form 3 (7 specimens): This form is a narrow-necked pot whose rim profiles on both sides curve gently (fig. 30a, no.3). Six out of the 7 sherds are very well burnished and 2 of them show red-slipping. They mostly have rounded lips. Five sherds came from Area 159 while the other 2 came from Areas 60 and 139, the specimen from the latter area being handsmoothed with a grooved lip. All came from phase I contexts.

Form 4 (12 specimens): A necked pot with squat everted rim. Lips are characteristically rounded (fig. 30a, no.4). Generally they are burnished, though those from areas 104 and 171 are handsmoothed. Only 5 of the rim sherds had horizontal grooves on the necks and shoulders. One sherd possessed a hollow stalk stamp over the body and neck. This form is found in Areas 104, 139 and 159 only.

Form 5 (2 specimens): This is a neckless, roughly spherical, deep pot. The rim sherds are highly weathered, but they possess grooved lips. One of them has two internal grooves just below the lip (fig. 35a, no.5). This form is not common and is restricted to phase I context at Area 139.

Form 6 (2 specimens): Form 6 is a necked pot with nearly straight rim (fig. 30a, no.6). Lips are squared and the form has one or two grooves on the body. This form is not common; one rim sherd came from Area 171 in a phase I context and the other came from Area 60 in a phase III context. While the former is handsmoothed, the latter is burnished.

Form 7 (3 specimens): This is a pot with a nearly straight rim having a flange just below the lip which is rounded (fig. 30a, no.7). The 3 rim sherds are all burnished. Found only in Areas 104 and 159, this form is restricted to phase II occupation.

Form 8 (10 specimens): This is another typical form, most probably the bowl version of Form 2 above. It has both rim profiles angular with a gently curved body. The base is rounded (fig. 30b, no.8). It has a very porous surface and sandy texture with shrinkage cracks, though the form is very well fired. All the rim sherds are handsmoothed with no evidence of burnishing.

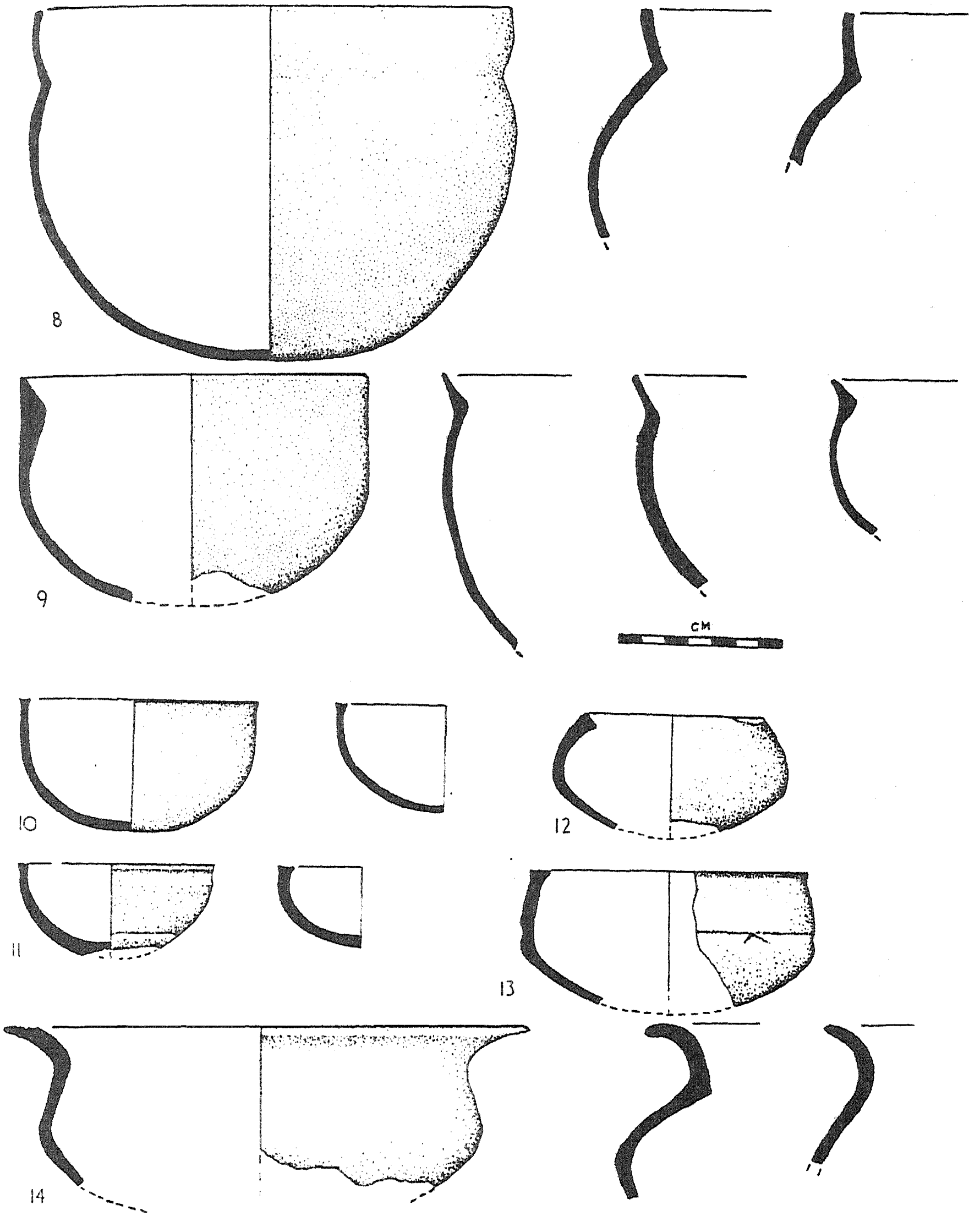


Fig.30b Vessel forms of Phase I ware

Careless, simple discontinuous grooves are located on the body, usually in a horizontal motif. The lips are characteristically squared. This form is found predominantly in phase I context of all the areas, though 1 was found in a phase III context at Area 159.

Form 9 (11 specimens): This is a bowl whose rim is very short in relation to the body (fig.30b, no.9). The rim slants inwardly at an angle with the neck. It is a particularly crude vessel, having clay bits showing on the body while the rim height may not be consistent in many sections of the same rim. Careless, short, discontinuous grooves are located on the body. All specimens had the inside of the vessels well smoothed. Seven out of the 11 specimens had squared lips. The four remaining from the depression in J24 at Area 159, had rounded lips. The form is found in all phase I contexts in the areas excavated.

Form 10 (17 specimens): This is a small open bowl which reminds one of the calabashes still used for drinking palm-wine. It is neckless and has a straight sided body (Fig.30b, no.10). It has a remarkable consistency in its body-wall. All the rim sherds are handsmoothed and have squared lips with no decorations at all. On the basis of depth and nature of base, this form may be sub-divided into three:

- (a) Round based and relatively deep forms. These form a majority (15 out of 17 specimens).
- (b) Round based but shallow - only one specimen was found and this was associated with the burial at Area 104 which was found in a phase I context.
- (c) Flat based and relatively shallow - only one specimen was found and this was also associated with the burial at Area 104.

Form 11 (29 specimens): This form is similar to 10(a) above in having a handsmoothed surface with a squared lip and round base (fig.30b, no.11). There are however differences; firstly there is a tendency for the rim to turn slightly inwards with a small line of thumb-smoothing, 5-8mm below the lip. Secondly apart from having a poorly finished surface one detects a line of fracture at the point where the rim turns slightly inwards. Finally it is smaller and shallower than Form 10(a) above. It is interesting to note that this bowl form is found restricted only to phases II and III of the central part of the site, from Areas 60, 104, and 159. Areas 139, 171 and 245 are completely devoid of this form. The two bowls associated with the burials from Area 159 are of this form.

Form 12 (2 specimens): This is an open, roughly spherical bowl of similar size to form 10 above but which shows an inward curvature from the shoulder to the lip which is squared (fig.30b, no.12). The form has a well-burnished surface, though the inside is handsmoothed. It has no decoration. Both specimens came from the J24 depression of Area 159, in a phase I context.

Form 13 (1 specimen): This is a slightly carinated open bowl with very good surface burnishing above the carinated section while the base is handsmoothed. It combines cuneiform stamping with a simple groove on the body (fig.30b, no.13). The lip is squared. This specimen also came from the J24 depression in Area 159.

Form 14 (25 specimens): This is a necked bowl with a smoothly everted rim (fig.30b, no.14). The surface is very well-burnished and the lip is rounded. Smudging is also common. This form may be divided into two sub-classes; 10 out of the 25 specimens were red-slipped and smaller than the rest which

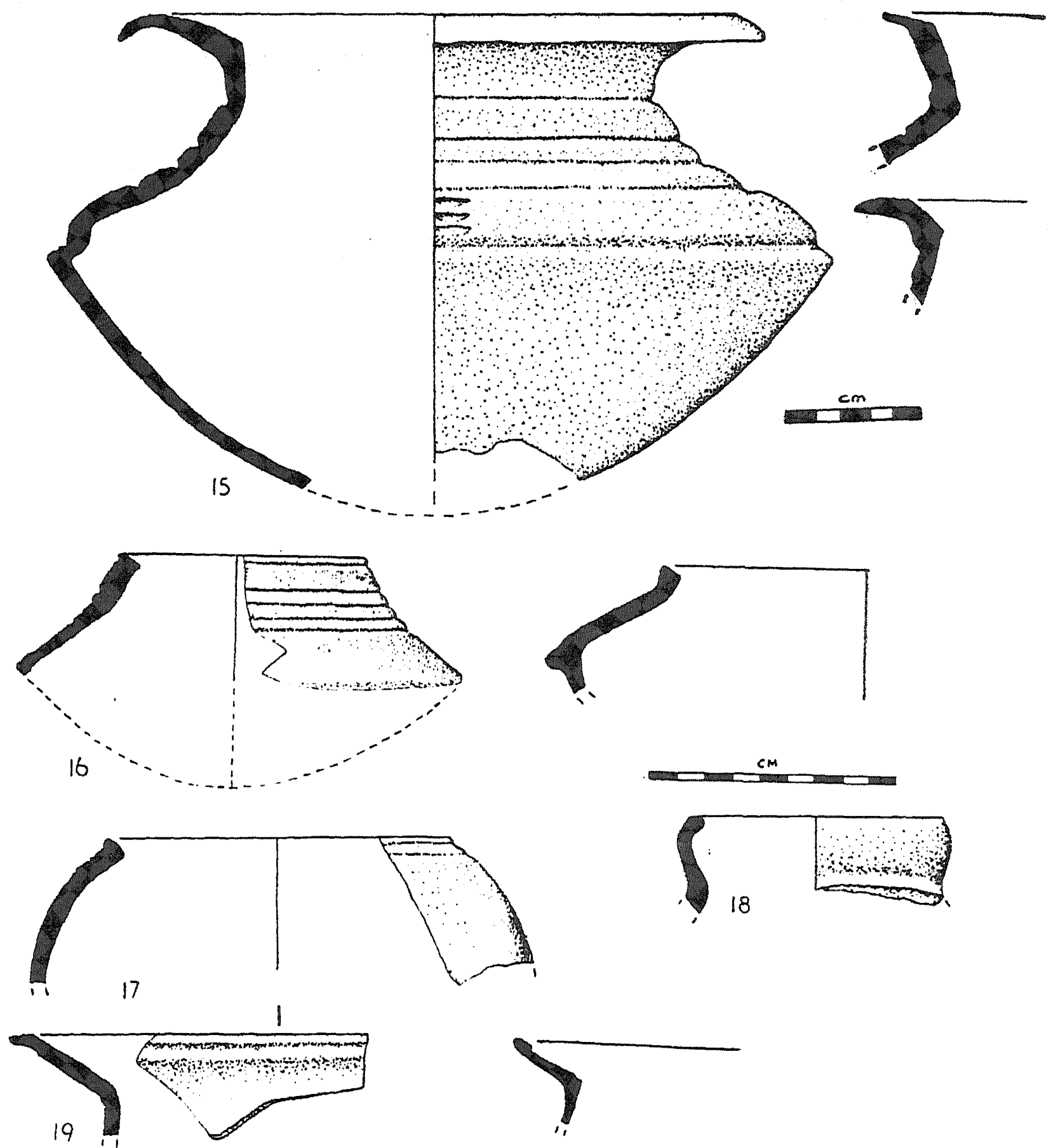


Fig.30c Vessel forms of Phase I Ware

lacked red-slipping but which had a black band on the slip. When bodies are attached, the latter shows a simple curvilinear groove on the shoulder and ripple marks on the body. The former is found in a phase III context in Area 104, while the latter was found in a phase I context from the J24 depression in Area 159. It would seem therefore that red-slipping on this form was a later addition.

Form 15 (7 specimens): This is a two-stage everted vessel. While the outer profile is smooth, the everted sections of the interior profile are angular (fig.30c, no.15). A complete vessel found in the phase II occupation at Area 104 shows that it has a carination and the rim diameter and height of vessel are almost the same. The main decoration is a series of banded grooves as a horizontal motif above the carination. As with Form 14 above, the section below the carination is handsmoothed. Six out of the 7 rim sherds have rounded lips. The seventh had a notched rim. There are 2 sub-classes: two-stage everted, short-necked rim sherds; and two-stage everted long-necked rim sherds. The former shows total handsmoothing and are restricted to the single occupation phase I areas of 139 and 171 while the latter are burnished above the carinated section and are found in the middle phase of occupation of Area 104 and the phase I context of the J24 depression in Area 159.

Upon inspection by retired potters at Krobo village and Takyiman, this vessel was likened to a Dwaresen (male bath bowl). According to them the wide mouth is to enable towels to be dipped in when bathing, and the beautiful banded grooves are to demonstrate the love of the wife for her husband. According to the potters, during the out-dooring ceremony the wife (who had before then either made such a special pot if she was a

potter, or commissioned it to be made) would present it to her husband officially.

Form 16 (6 specimens): This is a highly burnished, smudged, carinated pot which also shows a number of faint ripple marks. Four out of the 6 rim sherds had banded grooves above the carinated section. The lip is squared (fig.30c, no.16). This form had body sherds which showed stylised anthropomorphic designs of breasts and eyes.

The drawing of this form was shown to four retired potters in the area and they were unanimous in labelling it as tete frahina (ancient palm-wine pot). According to them frahina could be borrowed for funerals and therefore should be carefully modelled. All the 6 specimens were restricted to the J24 depression in Area 159.

Form 17 (2 specimens): This is an incurved, spherical pot. One rim sherd from the J24 depression in Area 159 is burnished and smudged while those two from the middle occupation at Area 104 are handsmoothed. They all have one or two horizontal grooves just below the lips which are squared (fig.30c, no.17).

Form 18 (1 specimen): This is a pot with an inverted rim (fig.30c, no.18). It is carefully burnished and smudged with tiny ripple marks but has no evidence of decoration on the rim. It came from the J24 depression of Area 159.

Form 19 (12 specimens): All the specimens here were fragmentary but they showed long, wide, everted rims with generally smoother outside profiles than the inner profiles (fig.30c, no.19). Interestingly the form has the inside surface very well-burnished while the outer surface is handsmoothed (a probably functional characteristic). Eight of the rim sherds have rounded

lips while the rest are grooved. Six of the rims came from the J24 depression of Area 159, the other six came from Area 104, all of them in phase I contexts.

(v) Inter-site comparison - All the sites of Asekye I, Nyinase and Dwomoo produced surface pottery which was almost exclusively of phase I ware. The sherds here were identical in paste, form, surface finish and decoration with those from the single occupation areas of 139 and 171 at Bono Manso. Except ten sherds from Asekye I which were burnished, smudged and had decorations other than the usual grooving and notching, none of the sites had pottery which exhibited the characteristics which have been discussed in connection with the J24 depression at Area 159. In addition even though the three sites of Kagbrema, Tiprama and Kramokrom were covered with later pottery, areas which exposed the whole deposits at each of the three sites produced phase I pottery. One can therefore be fairly certain that the first three sites were contemporary with the Bono Manso single occupation areas, while the last three were both contemporary with and later than the phase I occupation at Bono Manso.

Apart from these specific sites, phase I sherds have been found occasionally with typically phase III sites such as Old Takyiman and Twema, confirming the observation at Bono Manso that this ware continued to be used, though in very small quantities, at a later time. Indeed there is no doubt that this ware is characteristic of the very early village and town sites in the Bono Manso area, indicating that the founders of the capital had a pottery tradition similar to those from the same general area.

In Crossland's analysis of Begho pottery in 1973 he identified a ware which, from his descriptions, is very similar to phase I ware at Bono Manso.

He labelled this ware as "light-weight, buff-coloured ware" (Crossland: 1973, 69-75). This ware formed only 1.2 per cent of the total sherds analyzed at the Begho B2 site. Since then more areas have been excavated at Begho. One of these areas is the Nyarko quarter which has produced this ware in abundance (Crossland: 1976a, 35-52). Crossland considers the Nyarko quarter as representing an earlier phase in the chronological history of the Begho area (Crossland: 1976b). Two radiocarbon dates of 1045 ± 80 a.d. (N-2142) and 1120 ± 75 a.d. (N-2141) which have been obtained in association with this phase would seem to confirm this observation since the main Begho phase has been variously dated between the fourteenth and eighteenth centuries A.D. (Posnansky: 1971, 1973b). An examination of the forms of this Bono Ware (as Crossland now calls it) shows however that of the 6 main forms, three had very close resemblances with some forms of the phase I ware at Bono Manso (Crossland: personal communication).

The colour and type of clay are remarkably close to the phase I ware. It is worth noting however that the phase I ware at Bono Manso shows greater variety in form than the Bono ware of Nyarko phase. Moreover while the former ware is predominant in the Early phase, the latter is only second in frequency in the Nyarko phase (Crossland: 1976b, 40-41). Apart from these differences there are two other significant differences between phase I ware at Bono Manso and Bono ware from Begho area. Firstly even though there are lightweight sherds among the phase I ware at Bono Manso there are equally heavy ones, quite unlike those Crossland has noted in the Begho area. Secondly, while grooving and notching or scalloping are the predominant decorative techniques employed on phase I ware at Bono Manso, Bono ware from the Begho area displays a wide variety

of decorations such as grooving, incision, single dot stamping, notching, carved rouletting and comb stamping.

While no form in phase I ware at Bono Manso is comparable with any form at New Buipe, pot form B of Bonoso micaceous ware which Boachie-Ansah excavated from near the sacred hole of the Wankyi people (personal communication) is roughly similar to pot form 2 of phase I ware. Indeed, in view of the relative popularity of the ware in each of the two areas of Bono Manso and Begho, the writer does not think there were trade contacts as such. Rather it appears that phase I ware makers at Bono Manso had a similar, though not identical, pottery tradition and perhaps a similar level of pottery technology with the makers of the Nyarko phase Bonoware. Such a claim may not be applicable to the Ahwene area in view of the very superficial nature of its relationship with Bono Manso.

(vi) Summary of Phase I Ware analysis - From the analysis done so far it appears that in the earlier part of the town's life, the people at Bono Manso used virtually the same pottery types, though as will be shown later, a few significant contacts were being made outside the Bono Manso area. Yet judging mainly from the evidence from J24 in Area 159, the pottery underwent a steady evolution. Though it contained a number of typical phase I potsherds and other imported types such as Ahwene and Begho wares there were additions to the vessel forms and pottery technology seems to have attained significant advances. For example sherds were not only burnished and smudged, but also there was a tendency to add more decorations and the angularity of vessel forms began to give way to more gentle profiles. There was also the tendency for vessels to curve inwards compared with the generally open vessels of the single

occupation areas. Lips of vessels began assuming rounded profiles instead of being squared or grooved. This evidence and the point made in Chapter V about the J24 depression are sufficient to suggest that significant evolutionary changes occurred in the phase I occupation at Bono Manso. However the fact that the burial bowls are of the same form and ware in the three phases of occupation suggests a strong continuity if only in burial rituals.

b. Phase II Ware:

(i) Fabric - This ware is similar to phase I ware in the sense that it possesses a fine sandy texture, and in about 50 per cent of cases tiny specks of mica are seen in the fabric. However it has a number of distinct characteristics: firstly visual examination shows that roughly equal proportions of quartz and laterite nodules constitute the main non-plastic inclusions in the fabric. Texture is smooth but the ware exhibits a distinct grey core which may represent an open-fire technique. Colour is mostly dark-brown, though haematitic red and greys may be present.

(ii) Surface finish - Unlike Phase I ware, burnishing is more common than handsmoothing. Of the 5,760 sherds analysed, 3,181 (55.2 per cent) were burnished while 2,509 (43.6 per cent) were handsmoothed. Like Phase I ware however, sherds both burnished and red-slipped were few, totalling only 70 (1.2 per cent). Smudging is a common feature of this ware.

(iii) Decoration - Decorations are commonly executed against a burnished background. Of the 2,021 decorated sherds (which form 35.1 per cent of the total Phase II sherds analysed), 59.6 per cent were executed against a burnished background. This ware is also distinctive in the great variety of decoration employed. The various forms of roulette predominate though grooving is also common. In addition there is a high incidence of compound decorations, quite

unlike phase I ware. Also unlike phase I ware, decorations are generally located on the middle part of the vessel, that is, on the actual body.

(iv) Vessel form - (Figs. 31a-31c) - Generally speaking, vessel forms of this ware are more thick-walled and heavier than those of phase I ware. Lips of rims are also generally rounded or tapering unlike phase I ware which has a characteristic squaring or grooving of lips. Moreover the phase II ware shows more smoothly flowing vessels than the typical phase I ware. In terms of surface finish, general vessel profiles and lip forms, this ware shows similarities with the late phase I ware encountered mainly from the depression at J24 in Area 159.

153 reconstructible rim sherds were selected for form analysis. These were selected from Areas 60, 104, 159 and 245. (As has already been pointed out, no phase II sherds were recovered from the single occupation areas of 139 and 171). From the analysis, 15 vessels forms emerged and are described below:

Form 1 (19 specimens): This is a large, everted, necked pot commonly referred to by the retired potters in this area as Ahina (waterpot). It may have rims whose outer and inner profiles are gently curving or the outer profiles may be smoothly curved while the inner profile is angular (fig. 37a, no. 1). Rim height is appreciable in relation to the body sizes. The rim and neck are well-burnished and those with bodies attached are all decorated with corn-cob roulette on the body section in an irregular motif. This form is distributed fairly evenly among the four areas with phases II and III horizons mentioned above. They are however not restricted to phase II but are also fairly common in phase III.

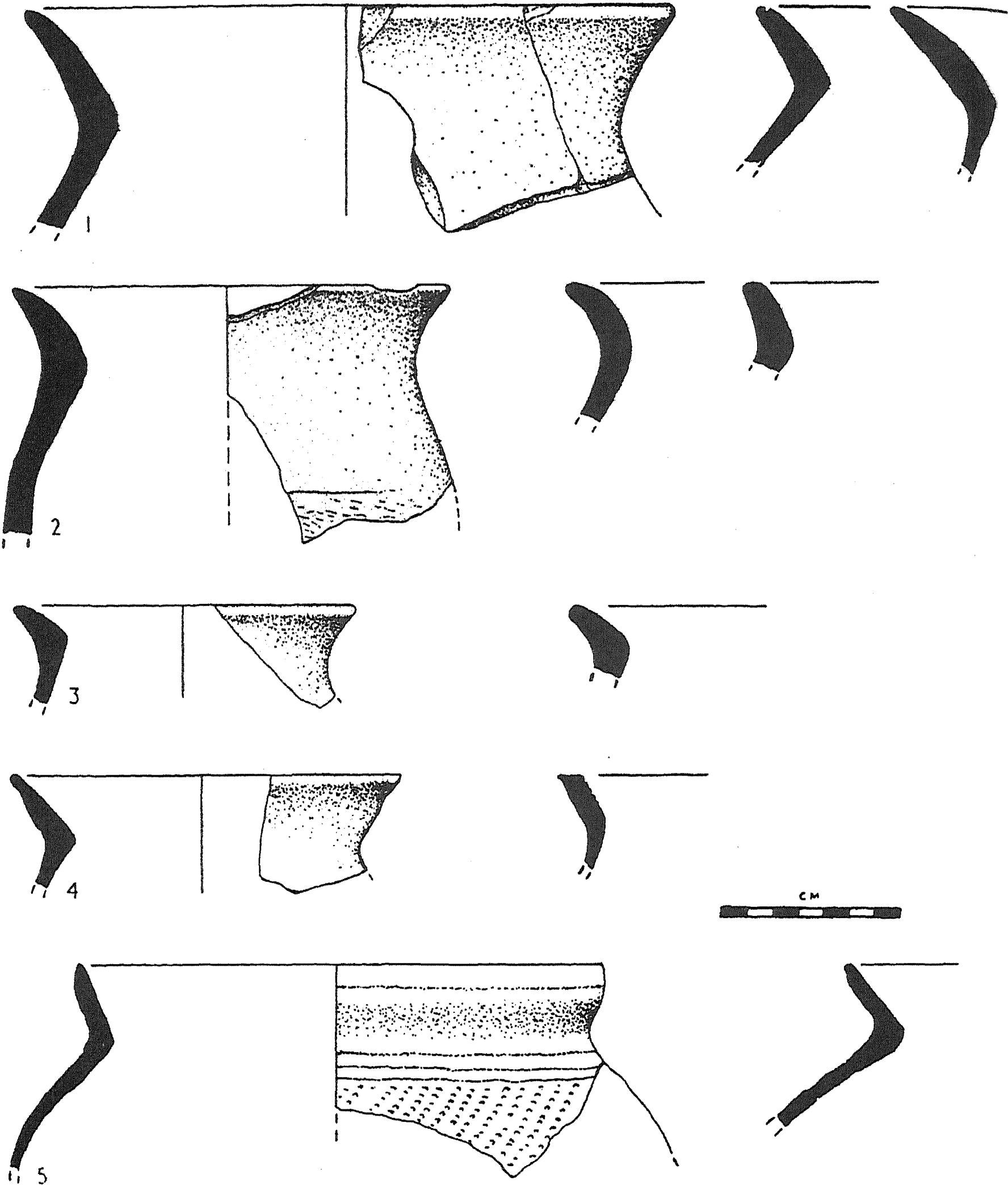


Fig.31a Vessel forms of Phase II ware

Form 2 (30 specimens): This is one of the commonest vessel forms of this ware. It is also an everted, necked pot of ahina type and is characteristically smoothly curved on both profiles of the rim. Rim height is fairly short in relation to the body size. It has generally thick walls though it is very light in weight, compared with Form 1 above. It has a burnished surface especially on the rim and neck. The rims taper and the lips are all rounded. Rim sherds which have bodies attached show corn cob roulette decoration in an irregular motif (fig.30a, no.2). This form is again fairly evenly distributed among the four areas under consideration. However, unlike form 1, this one is more restricted to the phase II occupation than the phase III occupation; of the 30 sherds, only two came from phase III context, at Area 104.

Form 3 (2 specimens): This is an uncommon form, similar to Form 2 but smaller in size. Its rim also possesses a more slanting inner profile than form 2 above. It is also very well-burnished with no evidence of decoration (fig.31a, no.3). Both rim sherds were found in a phase II context at Area 60.

Form 4 (13 specimens): This is a necked, everted pot with longer rim than Form 3 above. Rim profiles may be sharply curved or gently flowing (fig.31a, no.4). Not all the rims have tapering, rounded lips; five out of the 13 had grooved lips, two of which had the interior of the rims grooved. Moreover, unlike the other forms described above, 9 out of the 13 rim sherds were handsmoothed, some occasionally showing grog in the temper. The form is fairly evenly distributed spatially. Temporally too it is evenly distributed between phase II and III contexts.

Form 5 (6 specimens): This is a somewhat squat, slightly everted rim pot with both rim profiles angular. Rims are nearly straight and are mostly with

grooved lips. Burnishing is restricted to the necks; the bodies are handsmoothed. All rims possess medium cord roulette located on the bodies in inclined motifs. This form was found only in Area 159. Four rim sherds were in a phase II context while the other 2 were in a phase III context.

Form 6 (21 specimens): This form is most probably the bowl variant of Form 2 above. It is also one of the commonest forms. It is a necked bowl, smoothly curved on both profiles of the rim and body (fig.31b, no.6). On 10 specimens, lips are rounded while the other 11 are grooved. A greater number of the rim sherds have a sandy texture (11 specimens), while the rest show evidence of quartz nodules in the fabric. Decorations are absent on the rims but the bodies are characterised by inclined medium cord roulette. Except Area 245 where this form is not found, the three other areas produced sherds of this form and they were fairly evenly distributed in phases II and III of Areas 60, 104, and 159. On seeing this form the retired Krobo potters identified it with an ancient nkwansen (soup pot). No soot was found at the base of any of these forms to strengthen this claim.

Form 7 (8 specimens): This is a sharply curved, squat-rimmed pot (fig,31b, no,7). All the sherds here had grooved lips, without any decoration. Five of the sherds possessed the usual sandy texture and were well-burnished and smudged. All these came from phase II occupation in Areas 60 and 159, while the other three were handsmoothed without any burnishing and had grog as temper. These three were restricted to phase III occupation in Areas 60, 104, and 159. Only Area 245 failed to produce this form.

Form 8 (10 specimens): A nearly straight-sided open bowl with lips thickened in relation to the body wall (fig.31b, no.8). It has a slight eversion

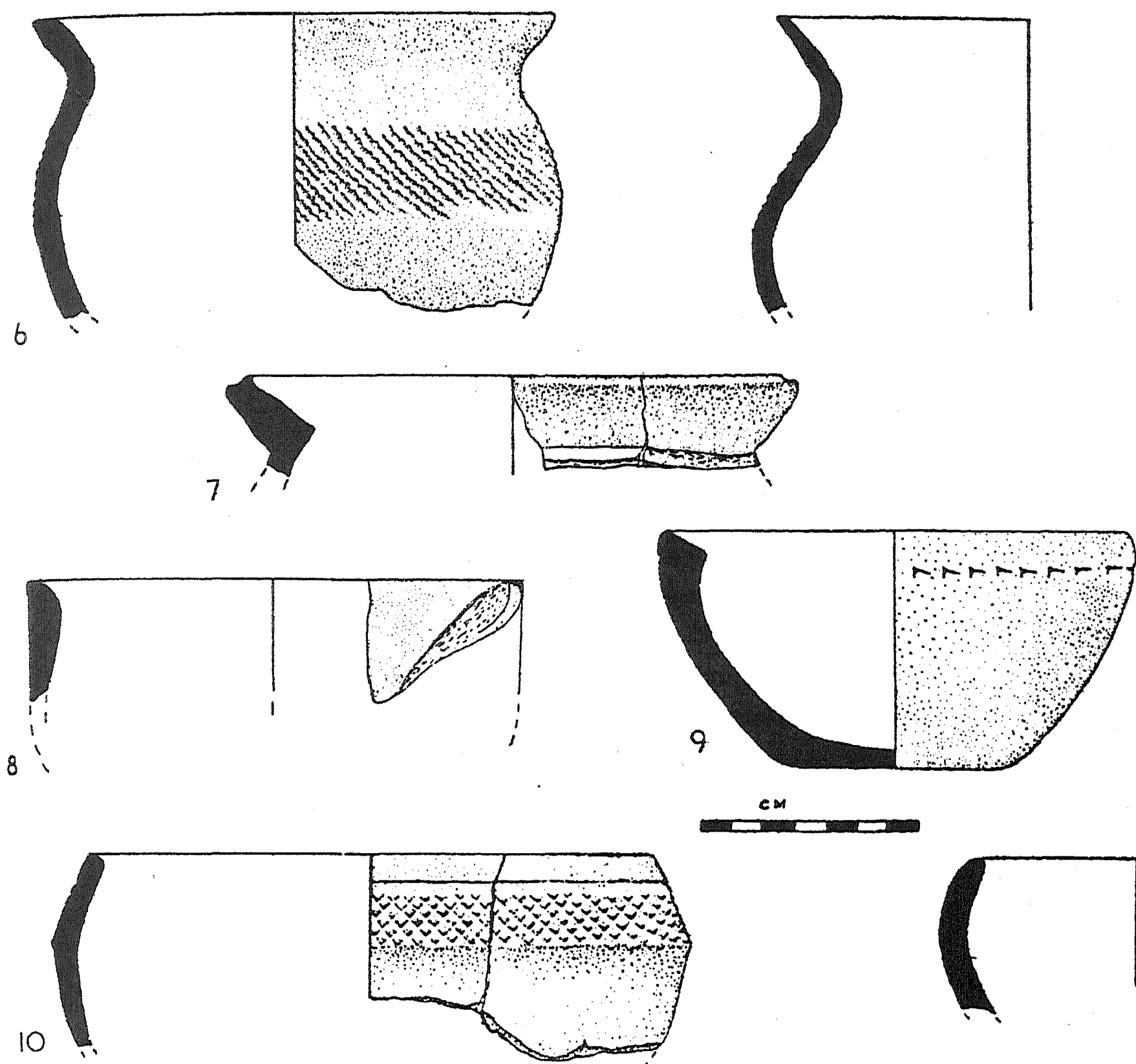


Fig.31b Vessel forms of Phase II ware

towards the lip. It is very well-burnished but not smudged. Only one rim sherd had inclined grooves on the body. This form was not found in Area 245 but was represented in the other three areas, all in the Middle phase of occupation.

Form 9 (1 complete specimen): This is a thick-lipped open bowl with very good overall burnishing and smudging. It has laterite and quartz temper. Cuneiform stamping is executed 11mm below the lip which slopes inwardly (fig.31b, no.9). This was found in phase II, in Area 159.

Form 10 (3 specimens): This is another incurved open bowl. It is also very well-burnished and smudged. Lips are all rounded. Only one sherd was decorated with crosshatched incisions on the shoulder (fig.31b, no.10). The sherds were found in phase II, in Areas 60, 104, and 159. Area 245 did not produce this form.

Form 11 (7 specimens): This form is a carinated open bowl with mostly rounded lips (fig.31c, no.11), though one rim sherd is squared. The form is characterised by horizontal banded grooves just above the carination. It is very well-burnished and smudged, and it is typical of phase II. All the four areas produced this.

Form 12 (26 specimens): This is an everted, necked bowl (fig.31c, no.12). The outer surface may be burnished or handsmoothed, the former being more common. Ten rim sherds possessed banded grooves in the interior of the rims. The rest were undecorated. All the four areas produced this form. However all the specimens from Areas 104 and 159 came from phase III deposits while those from Areas 60 and 245 came from phase II deposits.

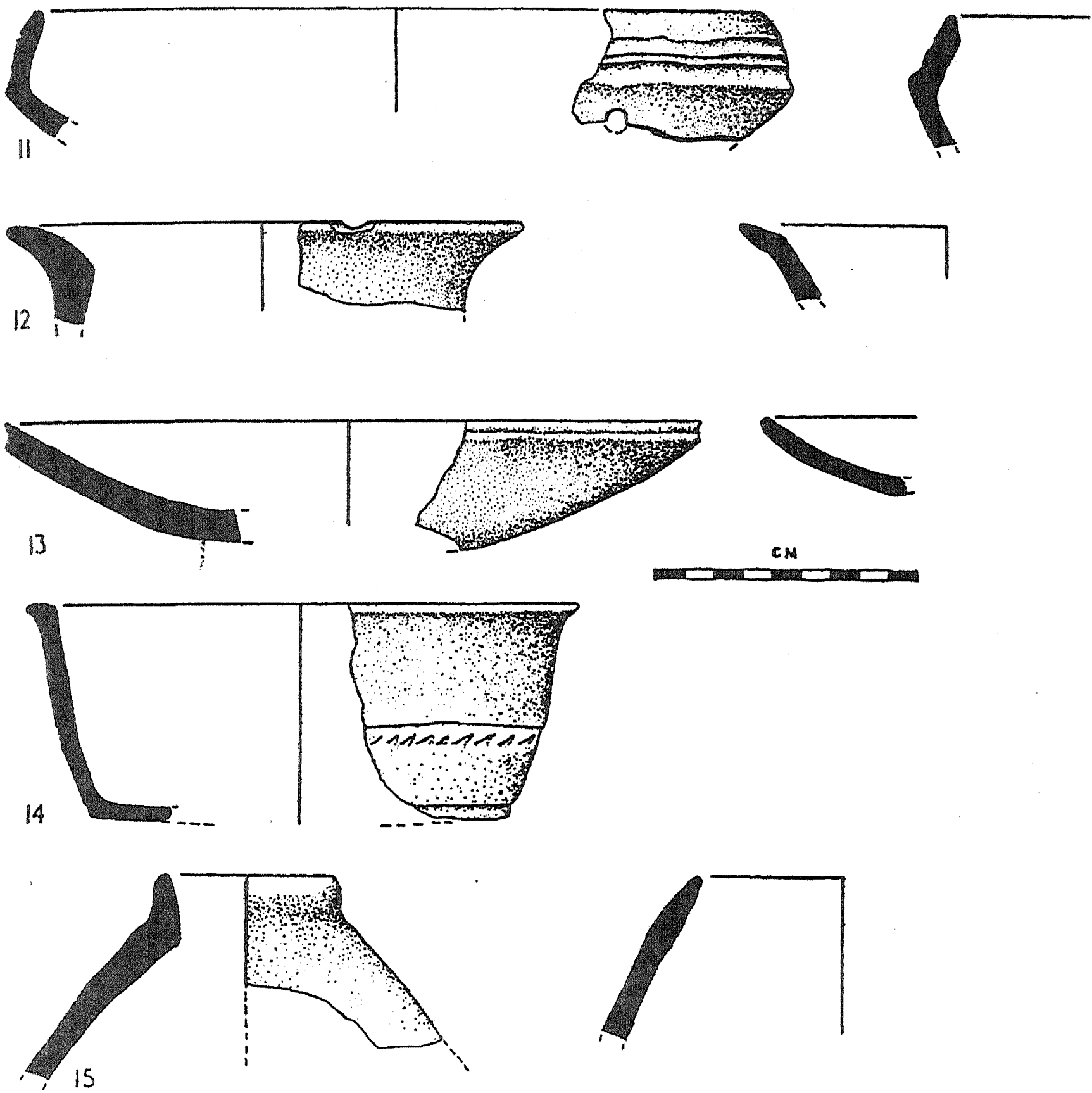


Fig.31c Vessel forms of Phase II ware

Form 13 (3 specimens): This is a plate. Two rims have grooved lips while the other one has a rounded lip (Fig.31c, no.13). The rim sherds are all handsmoothed and undecorated. The 3 specimens all came from Phase II context of Area 60.

Form 14 (2 specimens): A slightly convex open bowl, this form is straight walled and has a flat base. It is very well-burnished and smudged with a groove and cuneiform stamp, both in horizontal motifs on the body (fig.31c, no.14). All the 2 specimens came from Area 159, in a phase II context.

Form 15 (2 specimens): This is a spherical, narrow-mouthed pot with rounded lips (fig.31c, no.15). The two rim sherds were handsmoothed and undecorated. They were both from the phase III context of Area 159.

(v) Inter-site comparison - Although an admittedly uncontrolled surface collection was made, most of the sites in this area have produced sherds of this ware. These sites include Nkyiraa II, Amuowi II, Tiprama, Dwamti, Tanobuase, Longoro Nkwanta and Kagbrema (see fig.1). On all these sites the most frequently encountered forms are Forms 1 and 2 (This may also be due to the fact that these forms, being of bigger sherds are more easily noticed.) In view of its frequency in phase III deposits, one can only regard any site in the area with phase II ware as contemporary with the Phase II occupation at Bono Manso, if the site does not show any phase III sherds, as is the case at Bono Manso.

Surface pottery collected by Anquandah (1965) during his brief reconnaissance survey in the Takyiman-Wankyi area, which are now available at the Department of Archaeology Museum, are mostly of the phase II ware, especially of Forms 1 and 2. These sherds came from Tanobuase and Nkyiraa II. The two sites have

not been visited by the present writer, but the fact that phase III sherds were collected by Anquandah at Takyiman but none from the two sites, suggests that Tanobuase and Nkyiraa II sites may be contemporary with the phase II occupation at Bono Manso capital.

It appears that of the three most popular wares at Bono Manso, it is phase II ware which has the closest linkages with Begho ware in the Begho area. Indeed from Crossland's description of surface finish and paste, Begho ware is very similar to the general observations made on the phase II ware at Bono Manso, though red-slipping and fine cord rouletting (Begho type), which seem to characterise the former (Crossland; 1973, 37-38), are absent on the latter ware. It is significant that even though no identical motifs are obtained, the major decorative technique of each of the two wares is rouletting, forming 75 per cent of the total decorated sherds analysed at Begho B2 site (i.e. adding cord roulette to grooving-on-cord roulette - Crossland; 1973, 228) and 68.6 per cent of the total decorated sherds of phase II ware at Bono Manso (i.e. combining the two single decorations of corn-cob and medium cord roulette with their compound decorations of grooving-on-corn cob and grooving-on-cord roulette). It is also of interest to note that the pots still made by Mo (Degha-speaking) people of the Begho area are very similar to the vessel forms from the excavations at Bono Manso and Begho.

The above relationships seem to suggest that the two wares may have been made by a single culture group possessing a generally similar pottery tradition. Perhaps the variety noticed could be related to either a change through time or different ecological circumstances (Gifford; 1960. 341-348). In view of the relative popularity of the two wares in their own areas, coupled with the variety of forms in each area, one would consider the makers of the wares as

spatially distinct, but culturally related, though one must caution that only pottery has so far been studied in detail.

As with phase I ware, there was no relationship between any of the wares at New Buipe and that of phase II ware at Bono Manso, nor is there sufficient evidence for any relationship with Ahwene Koko.

(vi) Summary of Phase II Ware Analysis - What is clear from the analysis is that there was a continuity of this ware from a phase II context into a phase III context. What is particularly noticeable is the fact that whereas pot Forms 1 and 2, which have corn cob roulette, either singly or compounded with other decorations, are popular in the phase III deposits at Bono Manso, generally speaking the bowl forms which are decorated mainly with medium cord roulette or grooves are concentrated mainly in phase II. Also as far as the analysis is concerned, there is evidence that some sections of the site acquired certain vessel forms at different periods in time. For example Areas 60 and 245 acquired vessel form 12 earlier than Areas 104 and 159. And while Form 2 was acquired much earlier in Areas 60, 159, and 245, it was acquired in Area 104 later, in the phase III context.

c. Phase III Ware:

(i) Fabric - As already noted, this ware is mainly restricted to phase III and may only be found intrusive into the earlier phases of occupation at Bono Manso in negligible quantities. It is a very distinctive ware, characterised by a conspicuous speckle of silvery flakes of muscovite, some of which have well-preserved crystal shapes up to 2.5mm across. Unlike the two wares described above, the sherds in this ware glitter in the sun and when one has not decided to do any controlled collection, one may be tempted to collect more of them than the other relatively dull ones. Visual examination reveals quartz

fragments. Mineralogical analysis shows that much of the paste has low birefringence, perhaps due to incipient vitrification. This, coupled with the presence of possibly sintered margins to some of the muscovite flakes has led Dr. Talbot to suggest a fairly high firing temperature of above 800°C. If this is accepted, it will certainly suggest a fairly high level of pottery technology on the part of the makers of this ware, since the normal temperature for firing vessels in an open bonfire does not exceed 700°C (Boateng, 1972; Freeth, 1976; Shepard, 1965). Colour is predominantly grey though a few may be light-brown or black. The ware is generally loosely textured but it does not possess the grey core characteristic of phase II ware.

(ii) Surface Finish - Of the total 3,210 sherds, 1,878 (58.4 per cent) were burnished while 1,332 (41.3 per cent) were handsmoothed. Just as the two other dominant wares described above, phase III ware is also characterised by its conspicuous absence of red-slipping; only 9 red-slipped sherds (0.3 per cent) were represented. Unlike phase II ware, this ware is almost completely devoid of smudging.

(iii) Decoration - There is a high percentage of decorated sherds among this ware; of the total 3,210 sherds analysed, 1,182 sherds (36.8 per cent) were decorated. Phase III ware is very different from phase II ware but similar to phase I ware in possessing mainly single as opposed to multiple or compound decorations. Again, like phase I ware grooving is the predominant decoration. In terms of motifs, however, this ware has a greater variety than phase I ware, being parallel, curvilinear, or wavy and arranged either in single or banded forms. Taking these various motifs together, grooving forms 94.9 per cent of the total decorations on this ware. And as is the case with phase I ware, decorations are generally located on the necks or the shoulders of the vessels.

(iv) Vessel Forms (figs.32a-32c) - In many vessel forms of this ware have much closer links with phase I ware than they have with phase II ware. Rim and body thicknesses are remarkably close. Both have generally thinner vessel walls than phase II ware. Secondly rounded lips are rare with the two wares while they are very common with phase II ware. Indeed phase I and III wares have each a high incidence of squared or grooved lips. Thirdly, while some of the phase III sherds are almost identical with phase I forms, this is not the case with phase II wares. Finally phases I and III wares have very short rims in relation to the bodies of vessel, an uncommon feature with phase II ware.

115 rim sherds were analysed and these yielded 12 main forms which are described below:

Form 1 (12 specimens): This is an everted vessel with both profiles of the rim curving sharply, though there is no angularity. Of the 12 specimens, five had rounded lips; the rest were all with grooved lips (fig.32a, no.1). The body is bulbous and the base is rounded. Decoration, in the form of banded grooves in wavy line motifs, is found mainly on the body. All specimens are burnished. A complete specimen was unearthed in Area 159 and this contained the infant skeleton described in Chapter V. This form is fairly evenly distributed among Areas 60, 104 and 159 which demonstrate all the three phases of occupation.

Form 2 (23 specimens): This is the commonest vessel form, an everted short-rimmed pot whose rim and body profiles curve smoothly. Of the 23 specimens, 14 had grooved lips, 8 were squared and only 2 were rounded. All specimens were carefully burnished and decoration, mainly in the form of banded horizontal

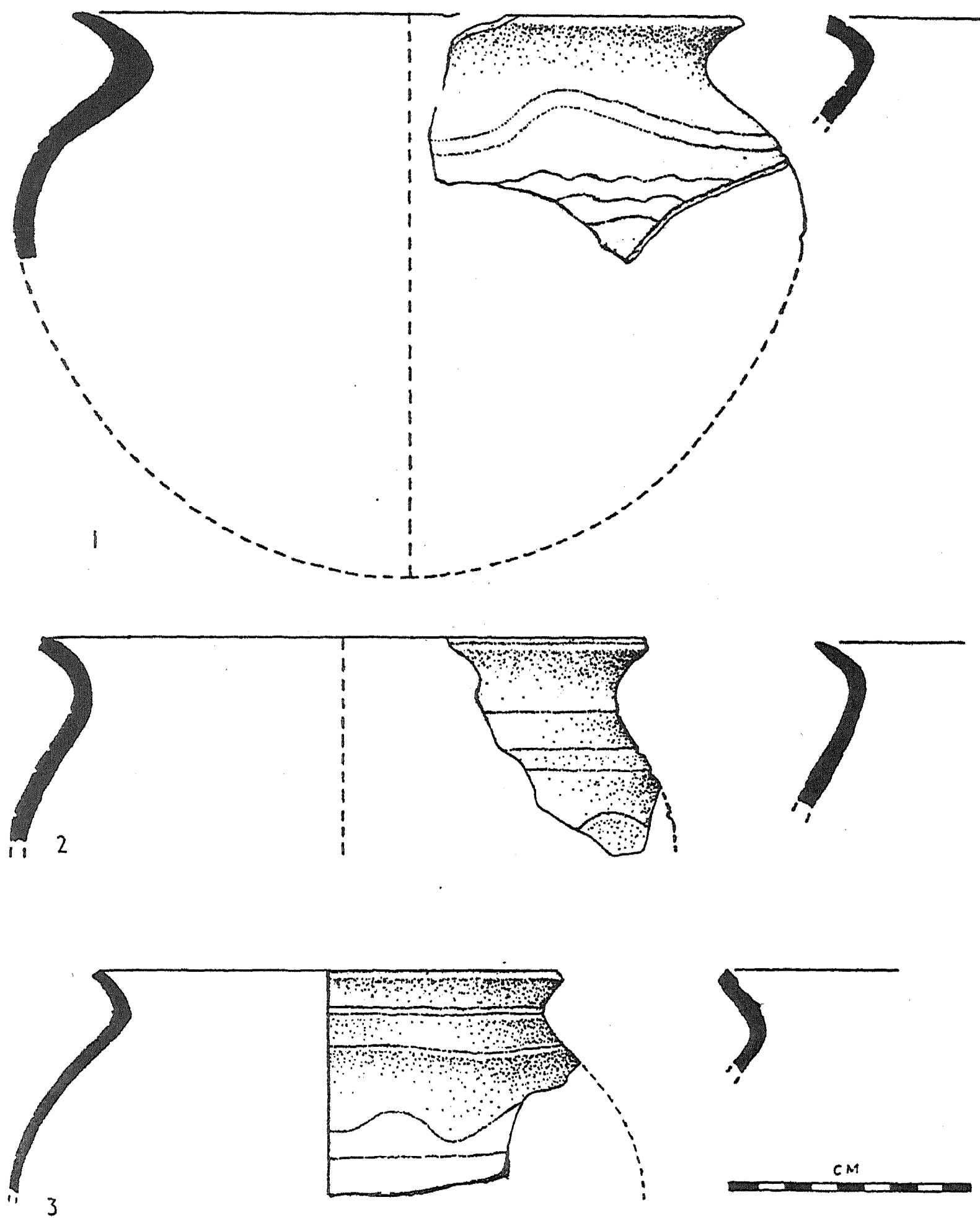


Fig.32a Vessel forms of Phase III ware

grooves, are mainly located on the upper part of the body, just below the neck (fig.32a, no.2). Though it was found in all the three areas, this form was much more common in Area 159 than Areas 60 and 104: of the 23 specimens, 14 came from Area 159, 7 from Area 104, and only 2 from Area 60.

Form 3 (14 specimens): This is an everted pot whose rim is shorter than Forms 1 and 2. Rims are sharply curved and the outer and inner profiles are angular (fig.32a, no.3). The body however flows gently. Burnishing is very well done and is found all over the vessel. None of the rim sherds had a rounded lip. Eleven out of fourteen had grooved lips while the other three were squared. All the three areas mentioned above as possessing this ware produced this form, although this time Area 104 turned out more of these than the other two areas: of the 14 specimens, 9 came from Area 104, 3 from Area 159, and only 1 from Area 60.

Form 4 (12 specimens): This is a large, vertically rimmed, spherical pot (fig.32b, no.4). Considering the size, the vessel may have a relatively narrow neck. Of the 12 specimens, 8 were burnished while 4 were handsmoothed. Decoration, mainly wavy-line grooving, is on the rim and shoulder. This form was not represented at Area 60 but was found in roughly equal proportion at Areas 104 and 159.

Form 5 (6 specimens): This form is a short-rimmed pot whose rim curves sharply but without any angularity. It is identical with vessel Form 4 of phase I ware (compare fig.30a, no.4 with fig.32b, no.5). It has a gentle constriction of the mouth in relation to the body. All rims are smoothly burnished, of which two have rounded lips while the 4 others have grooved lips. Only 1 sherd is decorated which is a wavy-line banded grooving on,

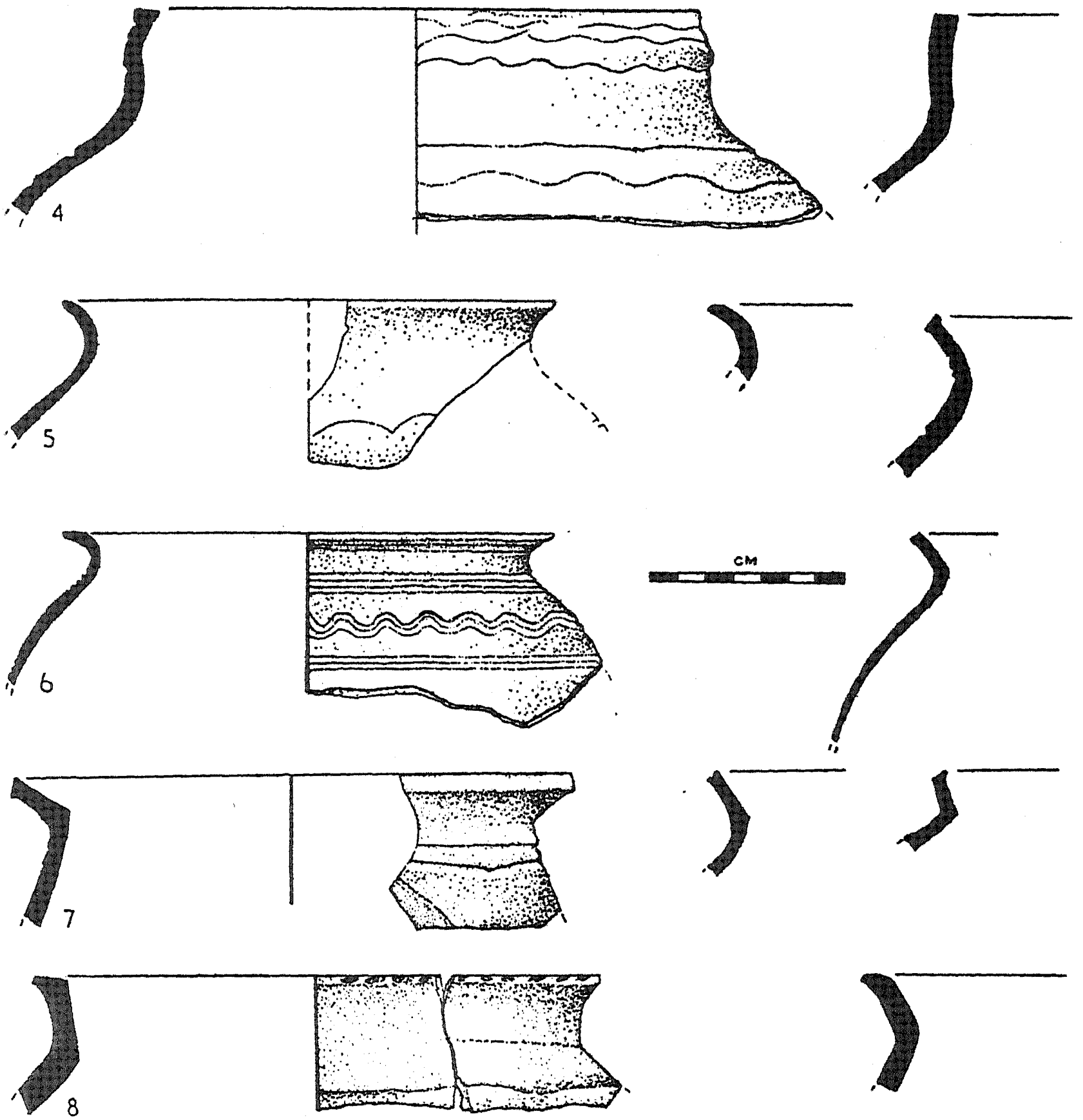


Fig.32b Vessel forms of Phase III ware

and immediately below the neck (fig.32b, no.5). This form is fairly evenly distributed among all three areas.

Form 6 (4 specimens): This is similar to Form 5, except that it has an everted rim which is nearly horizontal. As is the case with Form 5 above, the rim is very short in relation to the overall size of the vessel. It is also very well-burnished but it has a grooved lip (fig.32b, no.6). Decoration which is mainly grooving in a combination of horizontal and wavy-line motifs, is restricted to the neck and the shoulder of two of the vessel forms; the other two are undecorated. All the four specimens were found in Area 104.

Form 7 (13 specimens): Unlike the forms described above, under Phase III ware, this is a sharply everted, necked pot whose outer and inner profiles are both angular though the former is less angular and in a few cases may even be smooth (fig.32b, no.7). It is identical with Form 1 of phase I ware (see fig.30a, no.1). This form shows a variety of lip forms: eight rim sherds have grooved lips, two have squared lips, two with lips bevelled outside and only one with a rounded lip. All the five decorated rim sherds are executed against a burnished background and have parallel grooves on the neck. The form is fairly evenly distributed among the three areas excavated.

Form 8 (6 specimens): A straight necked slightly everted pot, this form has smoothly curved rim and body profiles. While two sherds have grooved lips, two are notched, one is squared, and the other one is rounded (fig.32b, no.8). Three of the rim sherds show excellent burnishing and it appears that mica has been used to coat the exterior. The three other sherds including the two notched ones are undecorated. This form is found only in Areas 104 and 159.

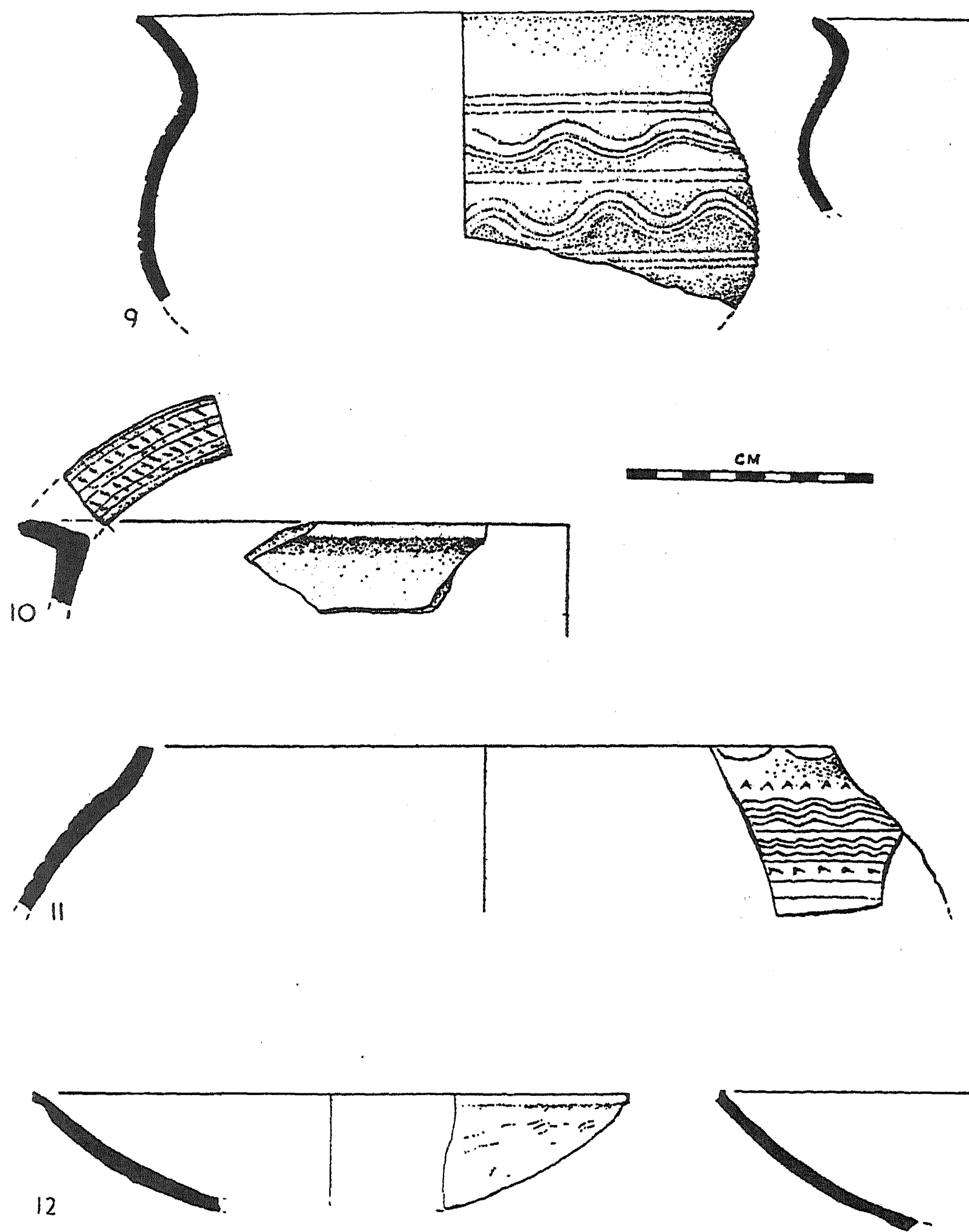


Fig.32c Vessel forms of Phase III ware

Form 9 (15 specimens): This is another popular form of phase III ware.

It is an everted bowl whose rim profiles gently curve. The body is slightly bulbous. The rim height, unlike the other forms described above, is fairly long in relation to the overall size of the vessel (fig.32c, no.9). All rim sherds are very well-burnished and display a combination of banded, parallel and wavy-line grooves which are distributed over the whole vessel. Even though a popular form, it was not represented in the Area 60 excavation but was evenly distributed between Areas 104 and 159.

Form 10 (13 specimens): This is a bowl with a horizontal everted rim (fig.32c, no.10). Rim sherds of this form were in fragmentary condition, but it seems to possess a fairly straight-sided wall just like Form 12 of Phase II ware. Eight sherds have rounded lips, four with grooved lips, and one with an outside bevel. Eight rim sherds were well-burnished while the other five were handsmoothed. Only five sherds were decorated but this time with horizontal grooves in the interior of the rims. Rim sherds with this form were fairly evenly distributed among Areas 60, 104 and 159.

Form 11 (1 specimen): This is a very rare form being a large, globular pot with excellent burnishing and having multiple decorations in the form of curvilinear and wavy-line grooves, the latter being bounded by two horizontal rows of cuneiform stamp (fig.32c, no.11). The rim sherd with this form was found in Area 104.

Form 12 (11 specimens): This is a plate identical with Form 13 of Phase II ware (see fig.31c, no.13 and fig.32c, no.12). It is characteristically handsmoothed and undecorated. Grooved lips are popular (6 specimens) though three rims have rounded lips and two are squared. While this form is fairly

evenly distributed between Areas 104 and 159, it is not found in Area 60.

(v) Inter-site comparison - Phase III ware has been found on the surface associated with some phase II sherds at the sites of Tiprama, Dwamti, Twema, Akyemhatae, Kagbrema and Old Takyiman in the Bono Manso area and these sites may be considered generally contemporary with the phase III occupation at Bono Manso. Of these sites, Old Takyiman was test-excavated and it produced almost exclusively phase III ware. Indeed only 0.3 per cent of the total 600 sherds were of phase II and Begho wares. The fact that phase II ware was almost totally absent at this site suggests, on present evidence, that the phase III occupation at Bono Manso was slightly earlier than the Takyiman site since the former possesses phase II sherds in addition to the typical phase III sherds. This observation seems to tally with the oral tradition which claims that Old Takyiman site was settled by some of the refugees who fled during the invasion of Bono Manso. This site was located close to Dwomoo where the wing Chief of the Bono state had his village, a site which had produced exclusively phase I ware.

Though mica is common in many parts of Ghana, the other attributes of this ware make it very distinctive. Crossland (1976b) describes micaceous ware II as containing large flakes of mica specks in the fabric just as phase III ware. Yet the other characteristics of the ware he describes are significantly different from what has been noted above, not only in decorations but also in surface finish. Phase III ware is also not represented at New Bupe (York, 1973). The only area where a similar ware has been noted is in the Ahwene Koko area. A look at the forms and decorations here shows a close similarity to the phase III ware at Bono Manso. The similarity in overall

form and details of rim-lip attributes are so close that one may mistake a form in one ware with another form in the other ware. A closer look however shows that whereas the phase III ware in the Bono Manso area is lighter and has more elaborate grooved decorations, the Ahwene Koko wares (as Boachie-Ansah calls them) in the Ahwene Koko area are heavier, slightly cruder, more handsmoothed, and have less elaborate grooved decorations while some have red slip. It is indeed tempting to suggest that phase III ware in the Bono Manso area was made by a culture group similar to those living in the Ahwene Koko area. The differences are equally strong in suggesting different stages and influences in the two areas. And in view of their general advancement over wares in Ahwene Koko area, one may not be far from right in suggesting that the Bono Manso phase III ware may be a later improvement over the Ahwene Koko wares. This suggestion seems to be in line with the results of a radiocarbon date from Ahwene Koko capital which puts the site at 1595 $\pm$ 80 A.D. (N-2354; Posnansky, 1976b, p.62). As will be shown in the next chapter, the phase III ware at Bono Manso lies within the seventeenth and eighteenth centuries A.D., suggesting that the wares at Ahwene Koko which bear close similarities with phase III ware at Bono Manso, are in fact earlier than the latter.

d. Begho Ware:

The term "Begho Ware" was first used by Crossland (1973, 227) to describe the predominant ware in the Begho excavations. In the Begho B2 excavations alone, this ware formed 98.3 per cent of the total 24,077 sherds analysed. In the Bono Manso excavations, this ware was found in small, yet appreciable, quantities. Of the total 16,888 sherds excavated from the six areas at Bono Manso, sherds belonging to Begho ware numbered 568 (3.4 per cent).

In view of its small quantity, and clear difference from the dominant Bono Manso wares in fabric, surface finish, decorations and forms, one may reasonably conclude that this ware was imported from the Begho area into Bono Manso.

(i) Fabric - The fabric of the Begho ware found at Bono Manso is a characteristic sandwiched variation of brown and black (though Crossland recognises grey colour also in the core area of this ware - Crossland, op.cit.). Dark lateritic concretions in the fabric of this ware clearly set it aside from the typical local wares in the Bono Manso area which possess either sand or quartz fragments.

(ii) Surface Finish - The surface is also clearly different from local wares in the Bono Manso area, being characteristically red-slipped; almost all the rim, neck and shoulder sherds are burnished and red-slipped.

(iii) Decoration - Many of the body sherds are handsmoothed and are decorated either with the single decoration of fine cord roulette or a combination of grooving and fine cord roulette, the former being executed against the latter's background. These two forms of decorations seem to predominate at Begho, though other decorations such as comb stamping, wavy-line stamping and grooving are also present (Crossland, op.cit.). In the Bono Manso excavations, many of these decorations are present on the sherds of this ware.

(iv) Vessel Forms - A total of 64 rim sherds were analysed and 13 vessel forms emerged which are described below:

Form 1 (10 specimens): This is a squat, everted necked pot with the outer and inner rim profiles being angular (fig.33a, no.1). All the rim-lips are rounded. Red slip is applied mostly on the outer part of the vessel though two sherds had the red slip on both sides. Six out of the 10 specimens were

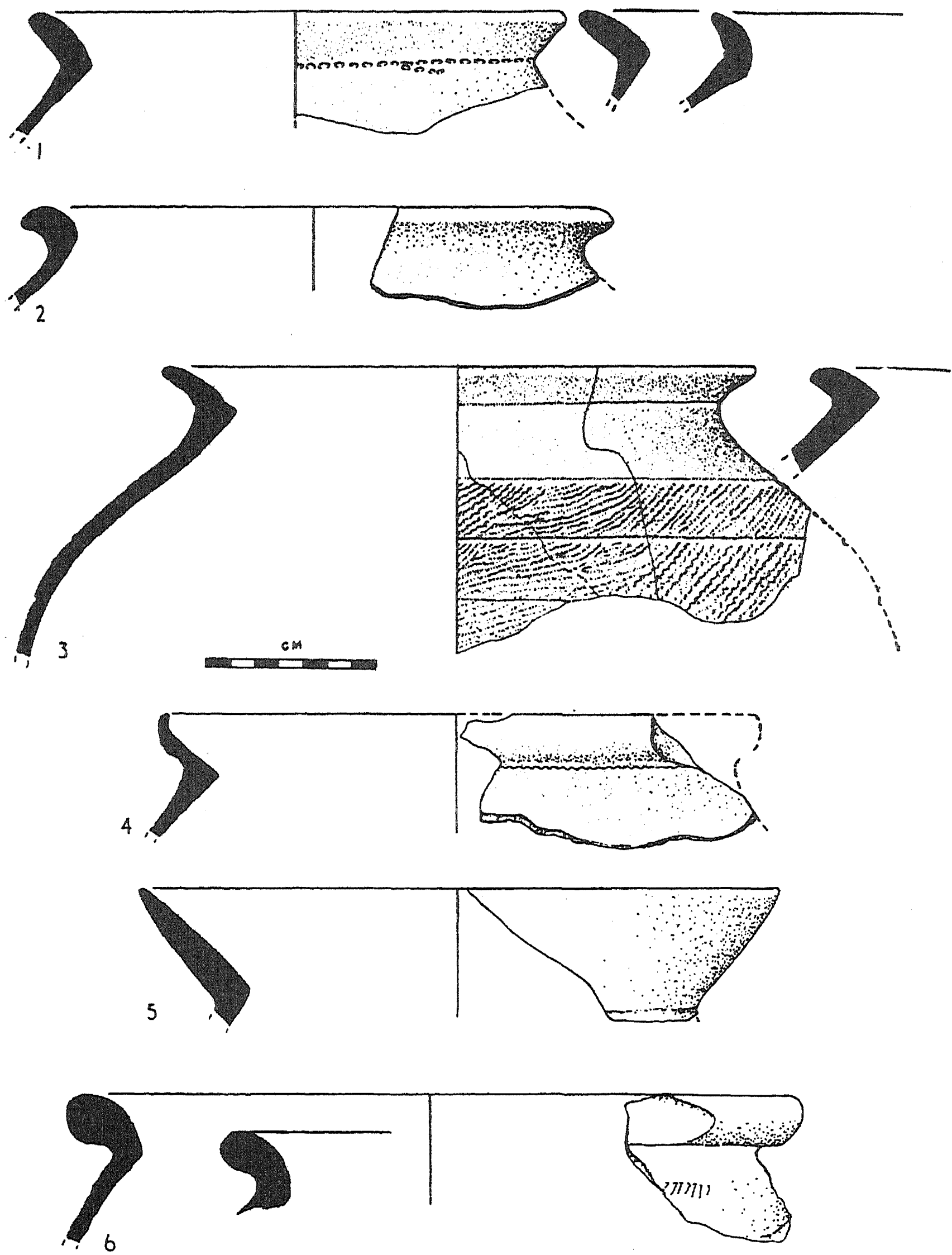


Fig.33a Vessel forms of imported Begho ware

decorated, three of which were comb-stamped while the other three had wavy-line stamping. Interestingly all the decorations were only on the necks. All the areas excavated produced this form except Area 60. Moreover all the sherds came from phase I contexts at each of the areas excavated. The form is identical to Crossland's pot Form A (Crossland, op.cit., pp.249-355).

Form 2 (2 specimens): This is another squat, necked everted pot with the rim slightly rolled. The outer and inner profiles are sharply curved but not angular. The rim-neck joint is twice the thickness of the body wall. The lip is rounded (fig.33a, no.2). Although the two specimens were burnished and red-slipped only one had a wavy-line stamp on the neck. Both sherds came from Area 60 in a phase I context. This form is similar to Form F of Crossland's Begho ware pot forms

Form 3 (12 specimens): This form is similar to the first two forms in having a squat neck with an everted rim (fig.33a, no.3). The interior profile is more angular than the outer profile. The lip is rounded. One rim sherd with its body attached is decorated with fine cord roulette over which horizontal grooves are executed. However the other nine decorated sherds were all with wavy-line stamping on the necks. Except Areas 171 and 245 all the rest of the excavated areas produced this form. And except Area 139 which had this form in phase I context, all the rest turned out this form in phase III occupation. It is identical to Crossland's pot Form C.

Form 4 (2 specimens): This is a recurved-everted pot with a pronounced angular profile in the interior of the rim-neck joint (fig.33a, no.4). Lips are rounded. Red slip is applied on both sides of the vessel. The two

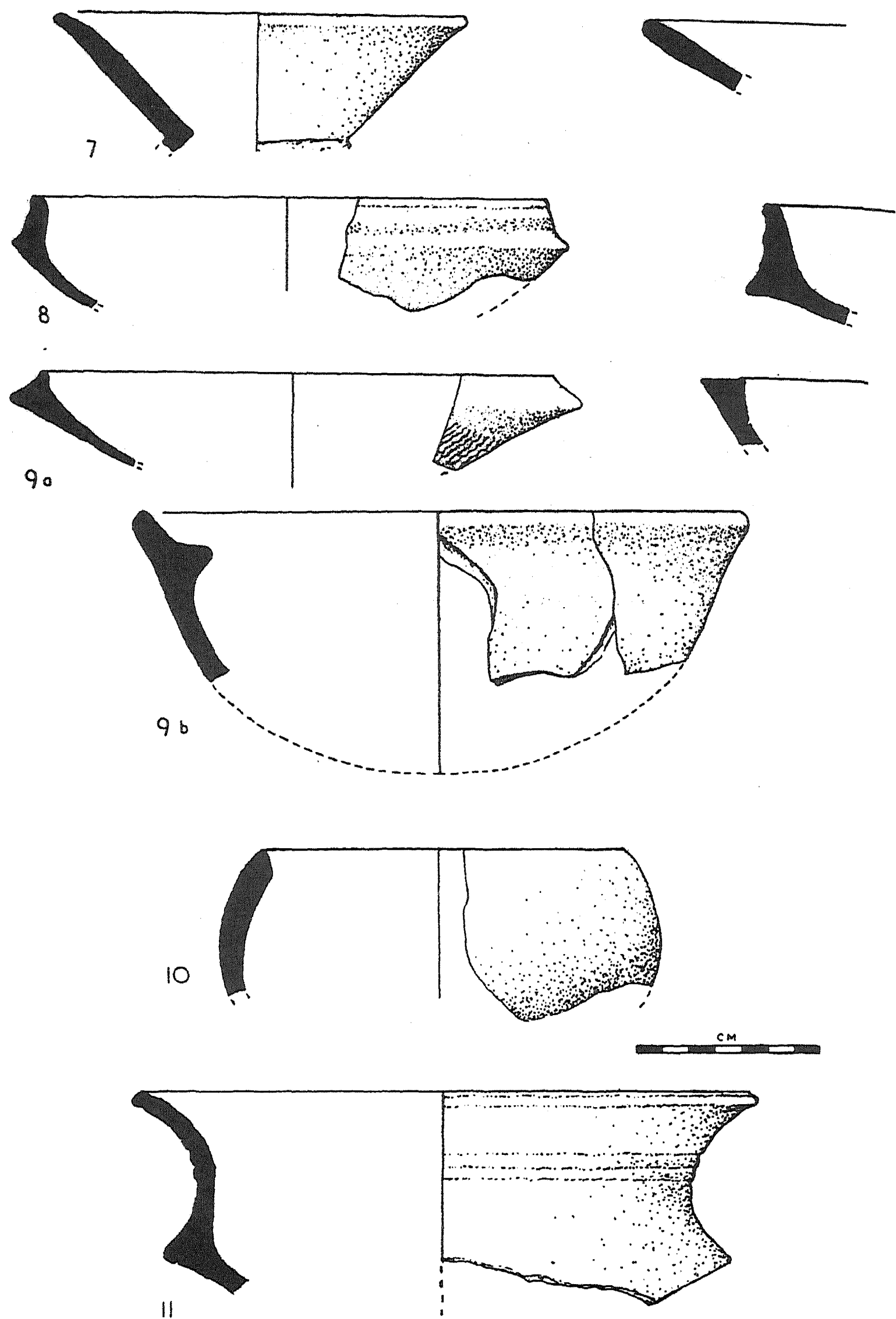


Fig.33b Vessel forms of imported Begho ware

sherds each came from Areas 60 and 104 respectively, in phase I contexts. This form belongs to Crossland's pot Form C.

Form 5 (6 specimens): This pot form deviates from the other forms described above in having a long tapering rim with a slight angularity on the inner and outer profiles (fig.33a, no.5). Though red-slipping is found on the outer and inner parts of all the rims, no decoration was encountered on any of them. Except Area 139 which had this form in a phase I context, Areas 104 and 159 which also produced this form had it in phase II contexts.

Form 6 (1 specimen): This form is similar to Form 2 above but it possesses a completely rolled rim with a slight angularity in the interior profile of the rim. Both the outer and inner parts of the rolled rim have been red-slipped. A fine cord roulette is executed against a burnished background (fig.33a, no.6). This form is only present in Area 104 in a phase I context and no doubt belongs to Crossland's pot Form F.

Form 7 (2 specimens): This form is similar to Form 5 except that it is more constricted and smaller. It also has more pronounced angular rim profiles. The lip is rounded and red-slipping is found on both sides of rim. No decoration is present on the rim (fig.33b, no.7). The two specimens came from the J24 depression in Area 159. Like Form 5, this form belongs to Crossland's pot Form D of Begho ware.

Form 8 (4 specimens): This is a slightly incurved, carinated bowl (fig.33b, no.8). The lip is rounded. Red-slipping is found all over the outer part of the vessel. Horizontal grooves are located above the carinated section, though sometimes these grooves are interrupted by a wavy-line stamp. Apart from Areas 171 and 245, this form was represented in the other areas, all in phase I

contexts. Form 8 clearly belongs to Crossland's bowl Form C of Begho ware.

Form 9 (4 specimens): This form is similar to Form 8 above. The main difference is that this form does not reveal any pronounced carination but shows a stepped lip which is rounded. This latter feature makes a sub-division of this form necessary (fig.33b, nos.9a & 9b): in the first case stepping is narrow and steep, whereas in the second case stepping is broad and gentle. All rim sherds are red-slipped. While Form 9a has fine cord roulette on the body, Form 9b is not decorated. And whereas both rim sherds of Form 9a came from phase I contexts at Areas 60 and 139, rim sherds of Form 9b came from phase III context at Area 159. Forms 9a and 9b are identical to Crossland's bowl Forms H and I respectively.

Form 10 (1 specimen): This is an incurved bowl with a rounded but slightly pointing lip (fig.33b, no.10). The interior is red-slipped but the exterior is only burnished and also undecorated. Only the depression at J24 in Area 159 produced this form which is identical with bowl Form B of Crossland's form classification of Begho ware.

Form 11 (7 specimens): This is an everted carinated bowl (fig.33b, no.11). Lips are either grooved or rounded. Red-slip is applied on both sides of the vessel. A band of 3 or 5 horizontal grooves are found just above the carinated section. This form is curiously restricted to Area 159 in the J24 depression and is identical with Crossland's bowl Form E of Begho ware.

Form 12 (2 specimens): This is closely similar to Form 11 above except that the rim is nearly horizontal, and wavy-line stamping replaces the band of horizontal

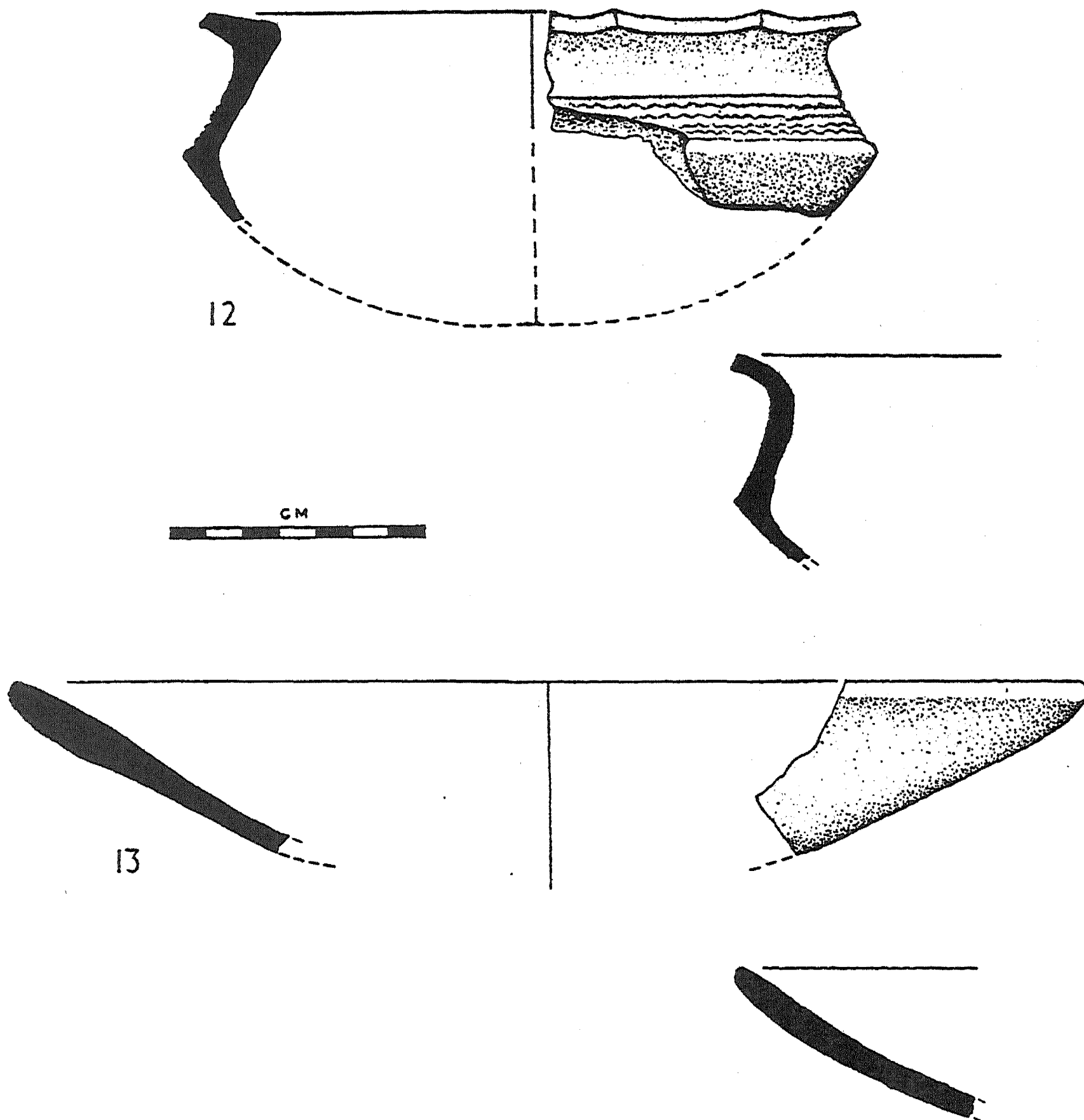


Fig.33c Vessel forms of imported Begho ware

grooves on Form 11 (fig.33c, no.12). The two rim sherds were found only in Area 104 in a phase II context. This form also matches with bowl Form E of Crossland's classification.

Form 13 (10 specimens): This is a plate with a band of black slip on the lip while the other parts are carefully red-slipped (fig.33c, no.13). Only one rim sherd came from a phase III context of Area 104; the other 9 rim sherds were restricted to the phase I context of J24 depression in Area 159. This form does not fit in any of Crossland's bowl forms, though bowl Form J is a near match.

(v) Inter-site Comparison - It will be difficult to compare Bono Manso with any other site in the immediate area in terms of the occurrence of Begho ware since it is very rare on the sites which are also mostly overgrown. Generally speaking however, the writer came across one or two of them only on the phase I single occupation sites such as Asekye I, Nyinase and Dwomoo. This general observation, coupled with the analysis of vessel forms above, and the information on general spatial and depth distribution of this ware at Bono Manso, make one conclude that even though there was a steady contact with the Begho area throughout the life-time of Bono Manso, this contact seems to have been more vigorous during the early phase of occupation of the capital than in the two later phases.

Although one cannot draw any meaningful conclusions on the spatial distribution of the Begho sherds at Bono Manso owing to their small quantity, it is significant to note that one vessel form which was found in an appreciable quantity was restricted to the J24 depression of Area 159. This is Form 11 which Posnansky has suggested may have been derived from one form of the brass bowls which were trade items during the trade between the Middle Niger and the

Begho areas in the period between the fifteenth and eighteenth centuries A.D. (Posnansky, 1973a, 159). If this suggestion is accepted the appearance of this form in the Bono Manso sequence is important. For none was found in the phase I single occupation deposits, but only in a context which I have explained above as containing late phase I elements. This would seem to suggest that the peak of trading activities which culminated in the local inhabitants of the Begho area fashioning their vessels after imported metal forms, was contemporary with the late phase I context at Bono Manso.

e. Silima (Design-Painted) Ware:

Painted pottery has long been considered a characteristic trait of the Volta confluence area in Ghana. Davies attempted to draw a parallel between Gonja painted pottery and that from Koumbi Saleh (Davies: 1964). Since Davies' observation other archaeologists, in attempting to find links between the Middle Niger region, where design-painting is a common trait, and the north-western part of Ghana where Mande trading activities were particularly strong between the fifteenth and eighteenth centuries A.D. (Goody, 1964; Wilks, 1961; Posnansky, 1973a), have also considered small quantities of these sherds as imports either directly or indirectly connected with the Middle Niger area (Posnansky, 1973b, 10; Crossland, 1976b, 51). One may remark however, that York who worked in Gonja observed that the painting tradition is pre-Gonja, suggesting that it is earlier than the Mande infiltration into the area, though it certainly increased in importance and quantity during the Mande colonisation from about the late sixteenth century A.D. (York, 1973, 121). Moreover, Mathewson has not only suggested that two different areas of the painting tradition are found in Ghana, one restricted to the Gonja area and the other east of Gonja in the Krachi area, but he

has also pointed out that painting occurs on many different types of wares (Mathewson, 1968, 25).

These observations since Davies' work in the Volta confluence are significant in our study of Bono Manso pottery. The following observations may perhaps suggest that the painted tradition has been oversimplified.

In the 1973 excavations, a few design-painted sherds were discovered. More of these were obtained in subsequent excavations. When all the pottery assemblages were being analysed however, it was discovered that in terms of fabric, surface finish, vessel form, and sometimes decorations, there were other sherds which, though not design-painted, were identical. This prompted the writer to re-examine the sherds more closely, with a similar result.

Such a study was also extended to the Begho pottery with a strikingly similar result. In many cases, of any three identical vessel forms with identical fabric and surface finish, one would be found to be design-painted while the other two would be without paint. And it was also noticed that while some of the forms recovered at Bono Manso were very similar to forms belonging to Silima ware in the Gonja area, there were other forms in the same category of design-painted sherds which did not show any resemblances at all with the Gonja forms shown by York (1973), but which possessed remarkable similarity to some design-painted sherds recovered in the Begho excavations (Crossland, 1973). This suggests that perhaps as Mathewson once noted, there are more areas of design-painted tradition to be located (Mathewson, 1968).

These observations indicate that design-painting is only one attribute among many, of a distinctive ceramic class yet to be named. The other equally important attributes may be summarised below: sherds belonging to this class are characteristically hard, concrete-textured, and can survive

very severe weathering processes. Sherds in this category are consistently thick and have longer rims than local wares from Bono Manso and the Begho areas. They make a distinctive clattering noise when they fall or are knocked against each other. Fabric is well-fired and it has a smooth, highly compact texture without any visible quartz or laterite nodules, although occasionally broken pots may be used as temper. Burnishing of the surface is a rule. However a great number of the sherds recognised are both burnished and red-slipped. As already noted in a few cases, linear designs may be found. A wide range of decorations is employed on this class, chief among which are grooving, comb stamping, cross-hatched incision and a multiple decoration of hollow stalk stamping and grooving. Sherds in this class have characteristically round or beaded lips.

What these observations suggest is that a greater quantity of this distinctive class has been encountered than has been described in the past. Whether this suggests a much stronger influence from the Middle Niger region is open to question, since by implication the source of this ware is yet to be fully known. This is not to suggest that the Gonja area is to be disregarded but only to emphasize that perhaps we need to look elsewhere for another source area of this tradition.

In order not to repeat the information above on fabric, surface finish and decoration, I propose to proceed to describe vessel forms.

(i) Vessel Forms (figs.34a-34c). A total of 128 classifiable rim sherds was analysed and 17 forms emerged. These are described below:

Form 1 (28 specimens): This form was initially added to phase II ware Form 1 but was separated later in view of the fact that though certainly identical in shape, the two forms possessed other entirely different

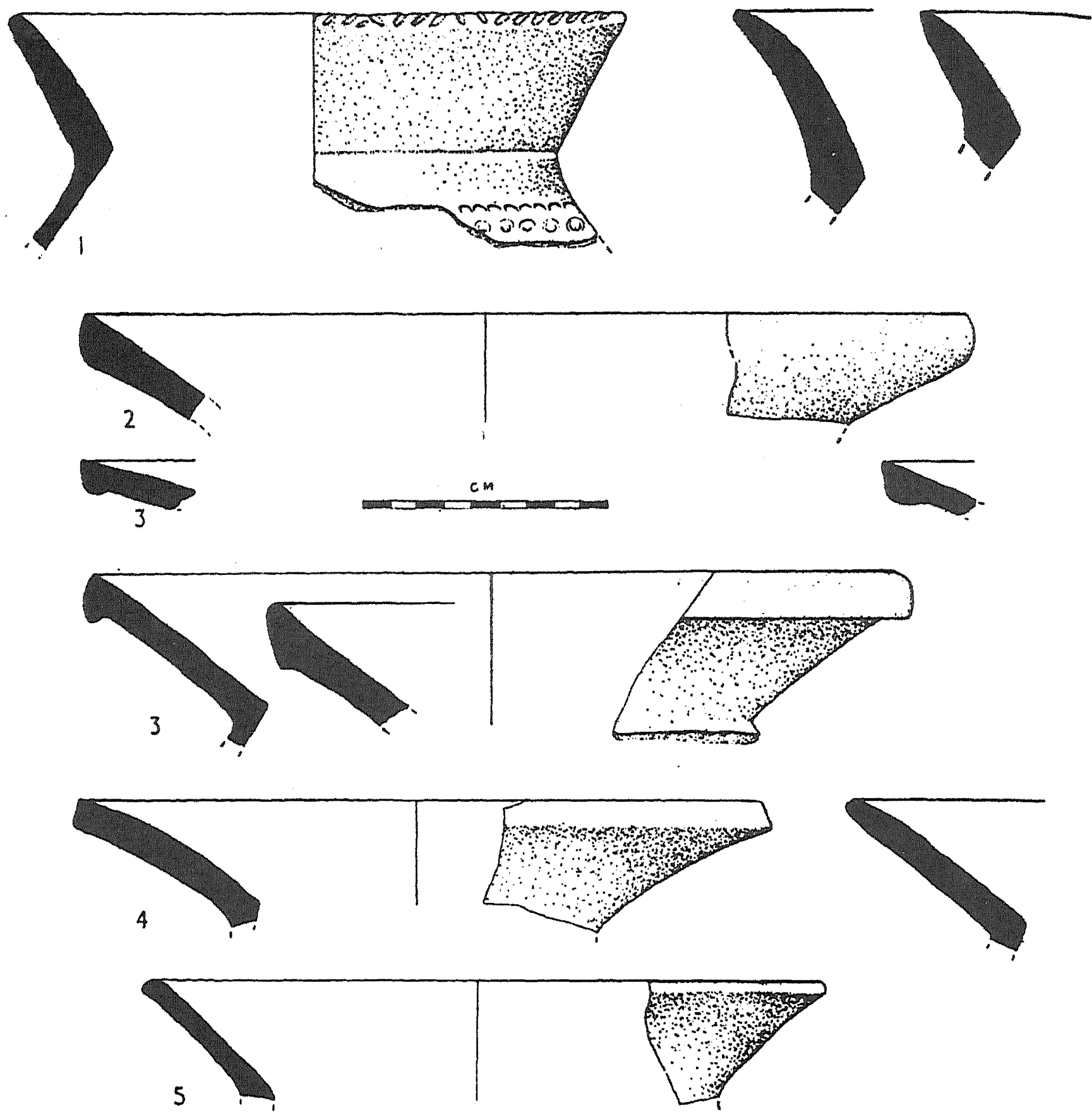


Fig.34a Vessel forms of Silima (design-painted) ware

attributes such as weight, fabric, surface finish and decoration. It is a large necked pot, heavier in weight than Form 1 of phase II ware. The rim is long and tapering and has sharp angles on both profiles of the rim-neck joint, though the inner profile is more pronounced (fig.34a, no.1). While phase II form 1 has handsmoothed sherds, this form is predominantly burnished and has a concrete-like texture quite unlike Form 1 of phase II ware which has an inner grey core characteristic of phase II ware. Red-slipping is however rare on this form. A multiple decoration of short stabs with hollow stalk stamp on the neck and shoulder is common and it reminds one of York's stamped ware (York, op.cit., pp.151-155). Body sherds may also possess a combination of hollow stalk stamp and corn cob roulette. It is found in all the areas excavated with phases II and III occupations; none came from a phase I deposit. It is more common in phase II in Areas 60, 159, and 245, but it is found in phase III context at Area 104.

Form 2 (9 specimens): This is a long-rimmed storage jar with sharp angles on both profiles of the rim-neck joint. The neck is fairly constricted. The lip tapers inwardly, with a slight beading (fig.34a, no.2) but the rim slopes at an acute angle in the interior profile to join the neck. Rim sherds with bodies attached show an irregular scoring of the inside surface. Rims and bodies are very well-burnished and red-slipped. Three specimens have red paint on the lips; otherwise there is no decoration. This form is mainly of phase I derivation, in Areas 104, 159 and 171. Identical rim sherds were discovered in the Amuowi I excavations (see Effah-Gyamfi, 1977; also Effah-Gyamfi, 1974). A similar form is shown in York's design-painted type (York, op.cit., Fig.17, 6b, 126).

Form 3 (15 specimens): This is similar to Form 2 above, except that this form has a pronounced beading of the lip. The interior surface of the body sherds also show irregular scoring just as Form 2 above (fig.34a, no.3). All the sherds were red-slipped and burnished but they were not design-painted. Yet a large rim from the Nyarko quarter which is identical in fabric, form and surface finish was elaborately design-painted. An identical form has also been illustrated by Crossland but this is not design-painted (Crossland, 1973 op.cit., Fig.3 - Miscellaneous Begho Ware, p.251). The Amuowi I rockshelter excavation produced this form too. At Bono Manso the form is fairly evenly distributed throughout the three phases of occupation; while it is found only in the phase III context at Area 104, it is more popular in phase I contexts at Areas 60, 139, 159 and 171. Area 245 did not produce this form.

Form 4 (7 specimens): This form is similar in general shape and size to Forms 2 and 3 above but it is not beaded and some rim sherds have squared lips, an unusual characteristic of this ware (fig.34a, no.4). It is also well-burnished and red-slipped and it is without decoration. A few have the interior surface of the body irregularly scored. This is also mainly a phase I form which was also found in the Amuowi I rockshelter excavation. At Bono Manso it was found in Areas 139, 159 and 171.

Form 5 (10 specimens): This is a pot with a constricted neck. It has a gentle curvature at the rim-neck joint. The rim, which is long, is slightly concave in the interior surface. The rest are either red-slipped and burnished or burnished only. This is also a phase I form, found in all the areas except 139. No direct counterparts have been noted in the New Buie and Begho excavations.

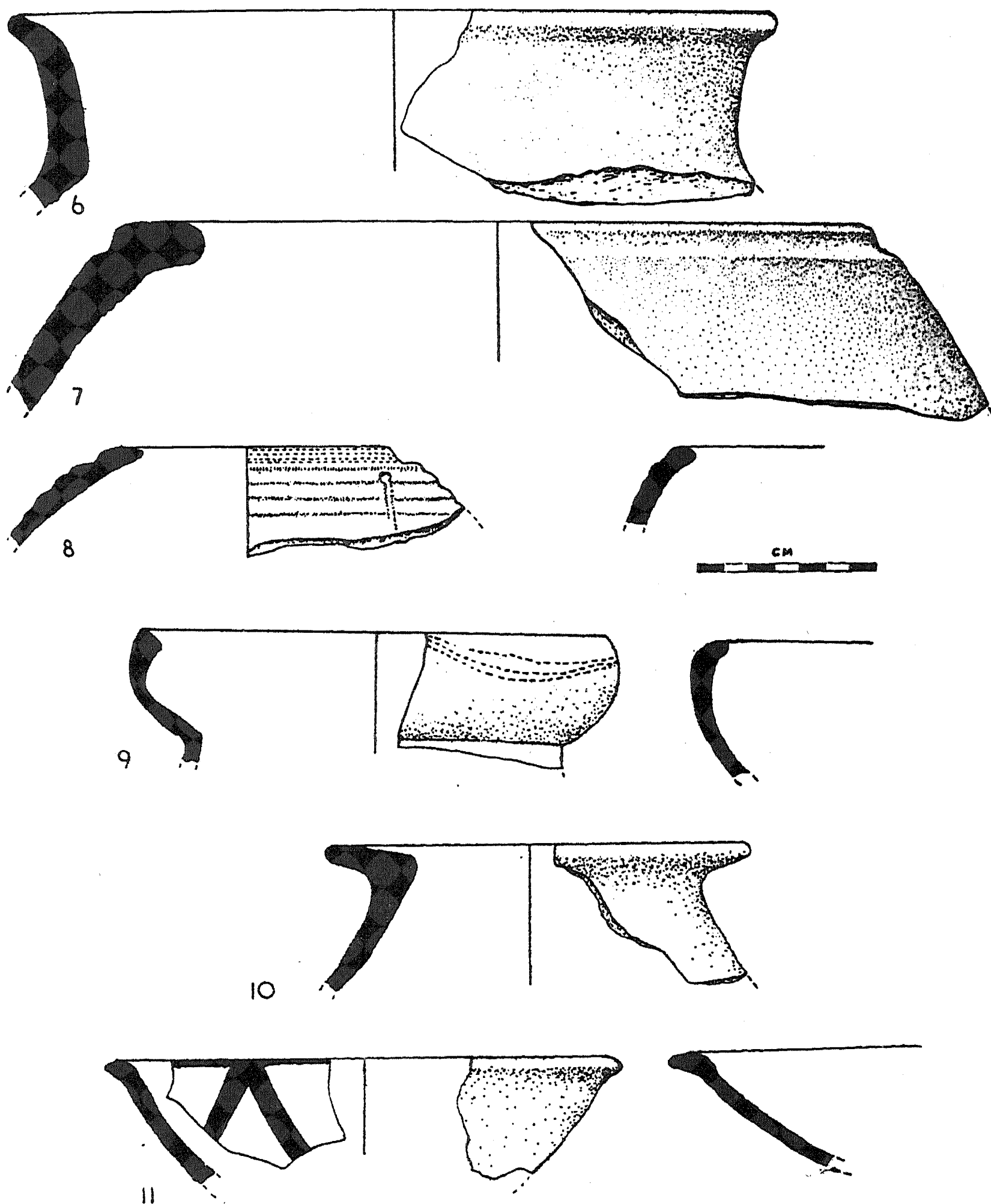


Fig.34b Vessel forms of Silima (design-painted) ware

Form 6 (1 specimen): This is a thick, straight necked, slightly everted pot (fig.34b, no.6). It is similar to phase III ware pot Form 8 in general shape though clearly different in the other attributes. It is highly burnished but has no red slip. The only specimen came from Area 104 in a phase III context.

Form 7 (10 specimens): This is a thick, heavy and large spherical pot whose lip is uncurved. The interior surface is irregularly scored but the outer surface is very well-burnished and red-slipped, though in no single case was a design-paint found. The mouth of the vessel is usually bordered by a single wide groove (fig.34b, no.7). In one case however, there was no decoration at all. This form is identical to York's comb-rimmed spherical pot (York, op.cit., Fig.71, p.148), though the characteristic combing is completely absent on the Bono Manso sherds. At Bono Manso the form is more popular in phases II and III occupations in Areas 60 and 159, though it is found also in phase I context at Area 104.

Form 8 (2 specimens): This is similar in shape to Form 7 above but it is smaller and lighter. In addition to the single wide groove towards the lip, a band of smaller grooves is found below the large groove. On the lip itself is a series of comb stamp arranged in a horizontal motif. Over this band of comb stamp is a red horizontal paint (not shown in fig.34b, no.8). The scoring found with Form 7 above is also present in the interior surface. Both sherds came from phase I context in Area 104.

Form 9 (5 specimens): This is a recurved, everted pot. The profiles of the rim-neck joint are both angular and the lip is either squared or rounded, the latter being more popular. Both surfaces are burnished and red-slipped with a paint on the necks of two rim sherds. These two sherds also possess

a band of comb stamp in a shallow curvilinear motif along the lips (fig.34b, no.9). One sherd is scored in the interior surface but the rest are burnished and red-slipped on both sides. The form is identical to York's Type 12 of micaceous ware (York, op.cit., fig.72, p.149, No.1) and Crossland's Form A of micaceous ware (Crossland, op.cit., Fig.17p, 265; see also micaceous ware Form 1 below). At Bono Manso this form is scattered in all three phases in Areas 60, 104 and 159.

Form 10 (1 specimen): This is a flat-rimmed pot whose outer profile of the rim-neck joint is less angular than the inner profile (fig.34b, no.10). The sherd is well-burnished but not red-slipped. It is also undecorated. The form has no direct counterpart at both New Buipe and Begho. The only specimen came from the J24 depression in Area 159.

Form 11 (12 specimens): This is an open hemispherical bowl with a short everted rim, smoothly curved in all cases. It is very well-burnished and red-slipped. Three rim sherds show linear paint on the inner lip and the inside of the vessel (fig.34b, no.11). The rest however are not design-painted. A form identical to this one was found at Amuowi I. York's type 16, though not of Silima ware, is similar to this form (York, op.cit., p.158). The form is also represented in Crossland's design-painted ware (Crossland, op.cit., fig.19, 267 di). The form is predominant in the phase I context at Bono Manso in Areas 60, 104 and 139.

Form 12 (4 specimens): This is an incurved, slightly carinated bowl with rounded lips (fig.34c, no.12). The outer and inner surfaces are well-burnished and red-slipped. No specimen was design-painted but they all have short incised lines on the carinated section. Both by form and decoration this

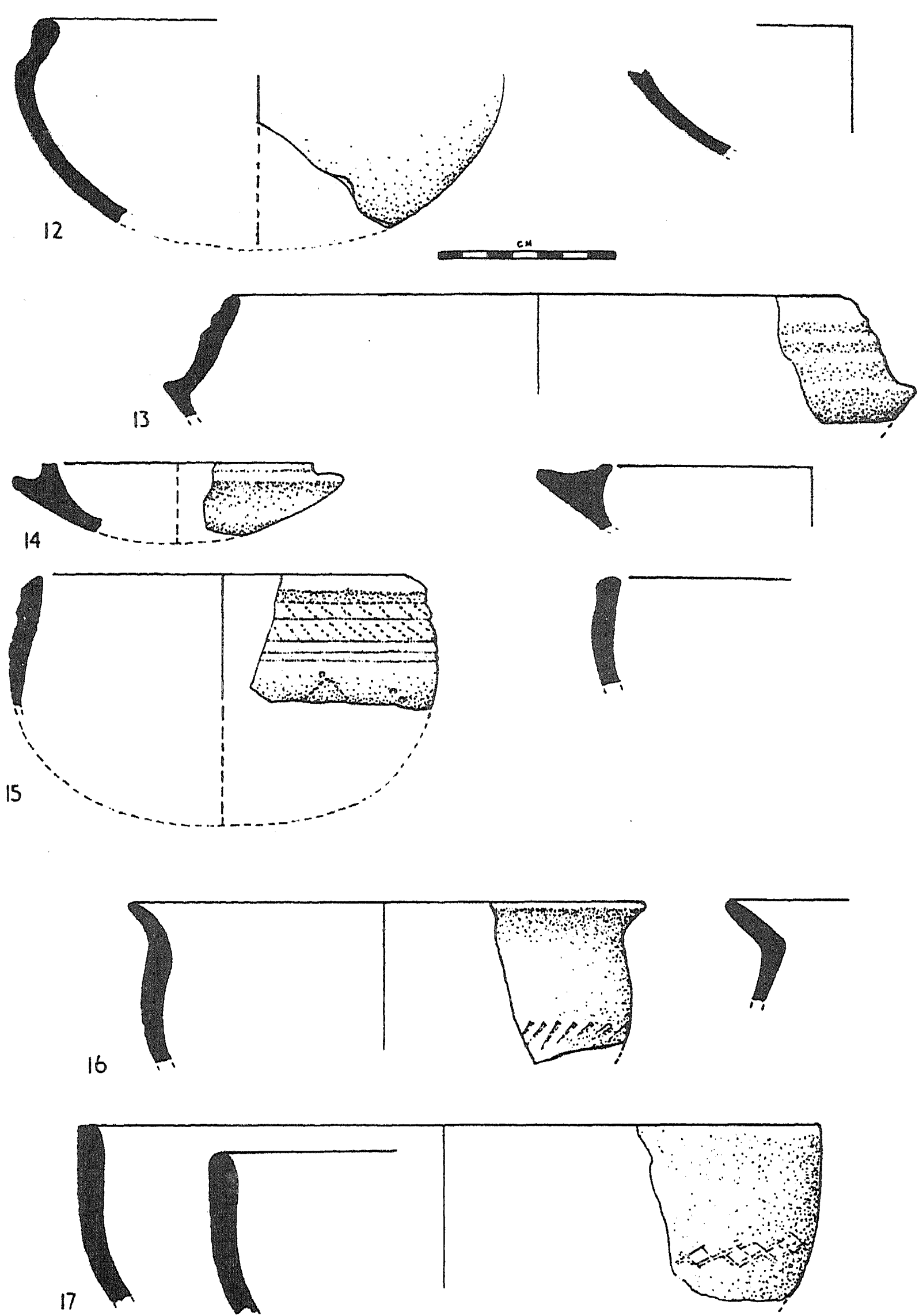


Fig.34c Vessel forms of Silima (design-painted) ware

form is identical to York's description of bowl type 14 at New Buipe though it is also not of Silima ware (York, op.cit. Fig.76, no.1, p.156). At Bono Manso the form is mainly of phase I derivation in Areas 104, 139 and 171, though Area 60 produced a rim sherd in a phase II context.

Form 13 (1 specimen): This is an incurved carinated bowl which is ridged with broad horizontal grooves near the lip which is rounded (fig.34c, no.13). It is only burnished but is neither red-slipped, nor design-painted, though it possesses other traits of this ware. The only specimen came from Area 104 in a phase I context. This form is not found among New Buipe forms but it is similar to Begho ware Form G (Crossland, op.cit., fig.6, p.254) and also Form 8 of Begho ware from Bono Manso described above.

Form 14 (5 specimens): This form is similar to Form 13 except that the carination here is more pronounced (fig.34c, no.14). It is however shallower and smaller than Form 13. Between the lip and the carination is a broad groove. Burnishing is well done in all cases but only two are red-slipped; none was design-painted. Form H of Crossland's Begho ware bowl forms is identical to this form (Crossland, op.cit., fig.6, p.254; see table 14 above). This form is scattered in the three phases of occupation, in Areas 104, 159, 171 and 245.

Form 15 (6 specimens): An open bowl with nearly vertical walls, this form has rounded or tapering lips. It is well-burnished and red-slipped with two specimens having a red paint on the lips. In all cases however, one or more broad grooves are found on the bodies. In one case inclined comb stamping is executed on banded grooves (fig.34c, no.15). The form is neither found at Begho nor at New Buipe. It is found scattered in all the

three phases, in Areas 104 and 159.

Form 16 (8 specimens): This is similar to form 11 but in this case the bowl has a well-marked everted rim. The form is angular at the rim-neck joint (fig.34c, no.16). Burnishing and red-slipping are carefully done on both surfaces of the vessel. Only two of the rim sherds were however design-painted on the outer surface of the neck and rim. Two other sherds had short, oblique stabs on the bodies. This form has no direct counterpart at the two major areas of comparison, though York's type 6a of Silima ware is very close (York, op.cit., Fig.53, p.122). At Bono Manso the form is found scattered in all phases of occupation, in Areas 60, 104 and 245. Curiously none was found in the phase I single occupation areas of 139 and 171.

Form 17 (4 specimens): This is an open hemispherical bowl similar to Form 15 above but larger and deeper. It is well-burnished but not red-slipped, nor does it have any design paint. The body is usually decorated with incisions in a cross-hatched motif (fig.34c, no.17). No direct parallels can be drawn with forms from Begho or New Buipe. The form is not found in phase I but it is either in phase II or phase III context in Areas 104, 159 and 245.

(ii) Summary of Silima Ware Analysis:

From the above analysis four things become clear. Firstly even though this ware was consistently coming in during the life-time of Bono Manso, there was a greater concentration of it in the phase I occupation of the site. This would seem to suggest that contact with whichever group was making this ware, was stronger in the early phase of the town's life. Secondly grooving, comb-stamping and incision were the main decorations used on this ware in phase I context but even though these were maintained, additional compound decorations of hollow stalk stamping on short stabs and

corn cob roulette were made in the two later phases of occupation on Form 1 which was not found in a phase I context. Considering its great quantity, and its remarkable similarity with phase II ware Form 1, one may suggest that Form 1 of this ware was an imitation of phase II ware Form 1, probably as a result of trade demand and competition. Thirdly almost all the rim sherds which were design-painted were in a phase I context, suggesting that the tradition of design-painting had almost died out in the two upper occupations at the site, though the ware continued to come in. Fourthly the fact that some forms, clearly design-painted at Bono Manso, are identical to forms which are not design-painted in the New Buipe and Begho excavations, is a pointer to the danger in using only one attribute in classifying a ware. Indeed from this analysis one can see that of about four vessels only one may be design-painted even though in fabric, surface finish, decoration and form all the four vessels are identical. This danger is a grave one when one considers that the use of a single attribute may lead to certain important results not being obtained. In our Bono Manso example, if design-painting alone were used as an attribute of this ware, the information that the ware continued to be used at the site even after design-painting had almost ceased coming in would not have been obtained. No doubt this would have led to certain dangerous inferences.

f. Mica-Coated (Micaceous) Ware:

The term "micaceous ware" was first used by York and later by Crossland and the present writer when describing a distinctive ceramic class whose outer surface is always treated with a thin slip containing a high proportion of muscovite while the inner surface is almost invariably red-slipped. This class is also characteristically decorated with comb-stamping either on the

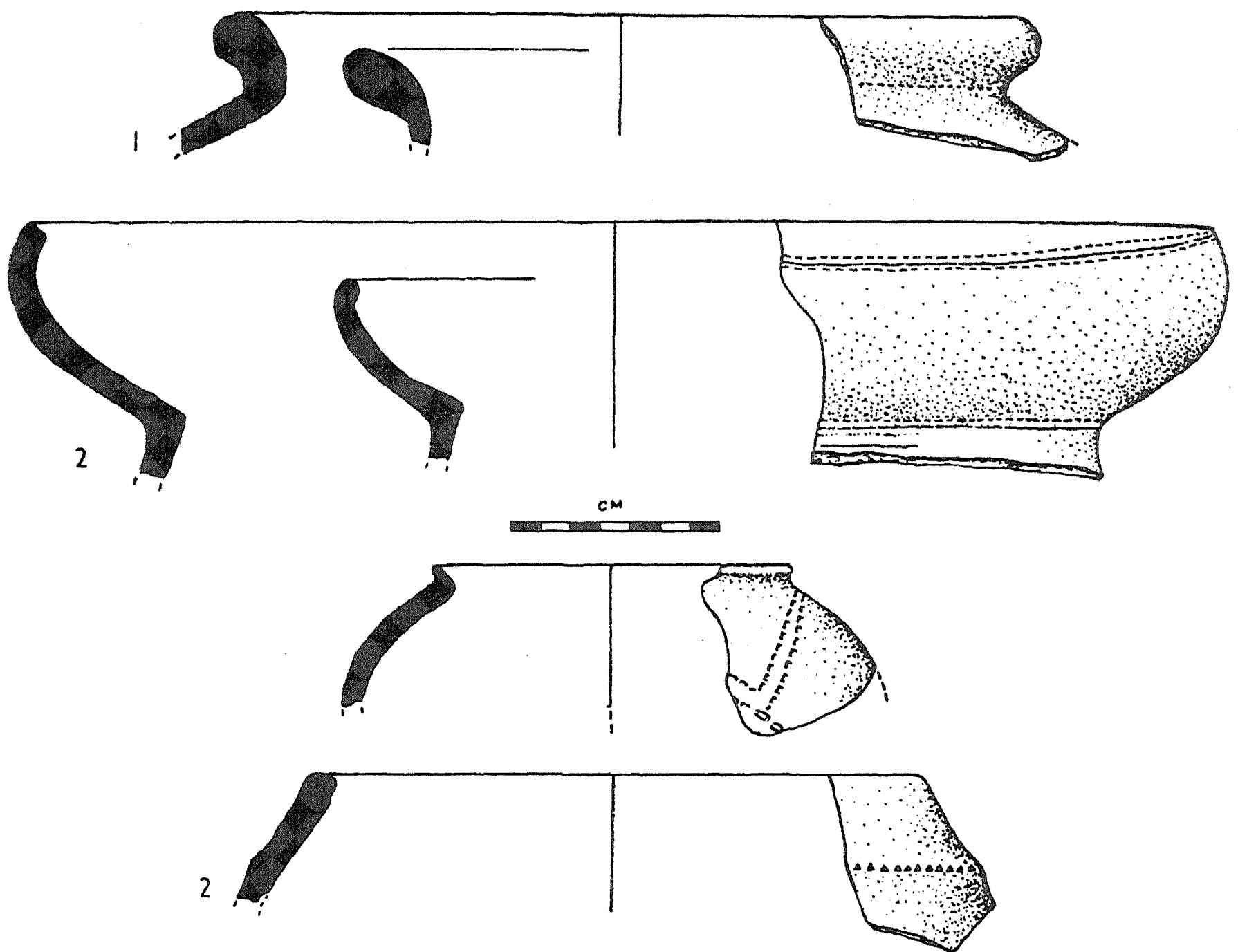


Fig.35 Vessel forms of mica-coated ware

neck or on the rim, and it appears to have two consistent and highly distinctive forms (York, 1973, 146-151; Crossland, 1973, 75-79; Effah-Gyamfi, 1974, 258-261).

Since the term "micaceous" is a little too broad and may include all sherds with mica found on the surface and in the fabric, in which case it would include Phase III ware, I propose to use the term 'mica-coated ware' which seems to describe this ware more specifically. This is because even if it contains mica in the fabric as it does, the distinctive characteristic is the coating of the outer surface with a slip of mica.

(i) Fabric - This ware is coarse in texture. Fabric is well-fired and in some cases grog or pounded pottery may be found. Visual examination shows tiny mica flakes which may range between 0.5 and 1mm in size.

(ii) Surface Finish - As already noted this ware has a sheen of mica slip which was intentionally coated either with a hard brush or a pebble, such that it not only displays a glittering outer surface but it is also very well-burnished. The inside surface is commonly burnished and also red-slipped.

(iii) Decoration - In order of frequency the main decorations are comb-stamping, fine cord roulette and grooving, although Crossland has also recognised incision, wavy-line and cuneiform stamping (Crossland, op.cit.).

(iv) Vessel Forms (fig.35) - Just as at New Bupe and Begho, two main forms were recognised at Bono Manso after analysing a total of 30 rim sherds:

Form 1 (6 specimens): This is a large pot with a rolled rim which is twice thicker than the body wall (fig.35, no.1). The lip is rounded and thickened and is in all cases red-slipped. The outer surface possesses the characteristic mica coating and the neck is decorated with a comb stamp. In three cases, however, the comb stamp decoration on the neck is replaced by a broad groove below which is a fine string roulette executed in an inclined motif. The form is

identical with Crossland's pot Form B of this ware (Crossland, op.cit., fig.17, 265) and York's pot Form 4 of Type 12 (York, op.cit., fig.73, 150). It is also significant to note that even though it does not belong to this ware, the same form is found among Begho ware (Crossland, op.cit., fig.2, 250 Form F; see also Bono Manso Begho ware Form 6 above). At Bono Manso this form was scattered in phases II and III deposits in Areas 104 and 159; no sherd came from the phase I occupation.

Form 2 (24 specimens): This is a large, recurved everted pot whose rim-neck joint is more angular in the interior profile than the outer profile. Lips are either squared or rounded. As usual the outer surface is mica-coated and well-burnished. The inner surface is both burnished and red-slipped. Comb-stamping is the predominant decoration on this vessel form, located both on the neck and towards the lip in a broad curvilinear motif (fig.35, no.2). Sometimes, however, a band of grooves may replace the comb-stamp on the neck while that on the lip will remain. Again one may point out that though they do not belong to mica-coated ware, identical forms have been found among Begho ware at both Bono Manso and Begho (fig.33a, no.4 above, and Crossland, op.cit., fig.2 Form G, 250) and among design-painted ware at Bono Manso with an identical decoration (see fig.34b, no.9). As already noted, an identical form has also been found by York at New Bupe (York, figs. 72 & 73 respectively, 149-150). This form also appeared in the Amuowi I excavation (Effah-Gyamfi, 1974, fig.4, 195). At Bono Manso this form is scattered throughout the three phases of occupation in Areas 60, 104, 159 and 171.

(v) Inter-site Comparison - Two independent mineralogical analyses, by Quarshie and Talbot, both formerly of the Department of Geology, University of Ghana, Legon, on specimens of this ware at New Bupe and Bono Manso

respectively agree that the ware is foreign to both areas (York, 1973, 150). While Quarshie is specific in locating the Banda-Bole area as the probable source, Talbot is less precise, suggesting only that the source may be north, west or south of the Bono Manso area (Talbot, personal communication).

A close examination of the attributes of the typical, dominant wares at Bono Manso clearly shows that the mica-coated ware is foreign indeed. On the other hand if one examines Begho ware in terms of forms, surface finish and decorations it appears to have a close link with this mica-coated ware. Similarly while the bulk of pottery in the Bono Manso area is distinct from design-painted ware, in form, surface finish and decoration, the latter has a close link with those from the Begho area. Moreover, it has been shown above that by form, decoration and surface finish, vessels of design-painted ware have been found to be identical with those of mica-coated and Begho wares. Although it is premature to hazard any guess of the makers of the other design-painted ware not found at New Buipe, and of mica-coated ware, the combined observations above are so tempting as to suggest that perhaps another source of design-painted tradition coincides with that of mica-coated ware. In other words, the makers of the two wares may have been very culturally related. In view of the close connection displayed among the Begho pottery with the two wares, the writer submits that the Banda area adjoining Begho in the north is the most probable candidate. This is in keeping with Quarshie's suggested source area of the mica-coated ware.

g. Ahwene Koko Ware (figs. 36a-36b).

Pottery in this class has been found to be frequent in the Ahwene Koko capital site where Boachie-Ansah excavated recently. Much has already been said about the similarities of wares at Ahwene Koko and the phase III ware

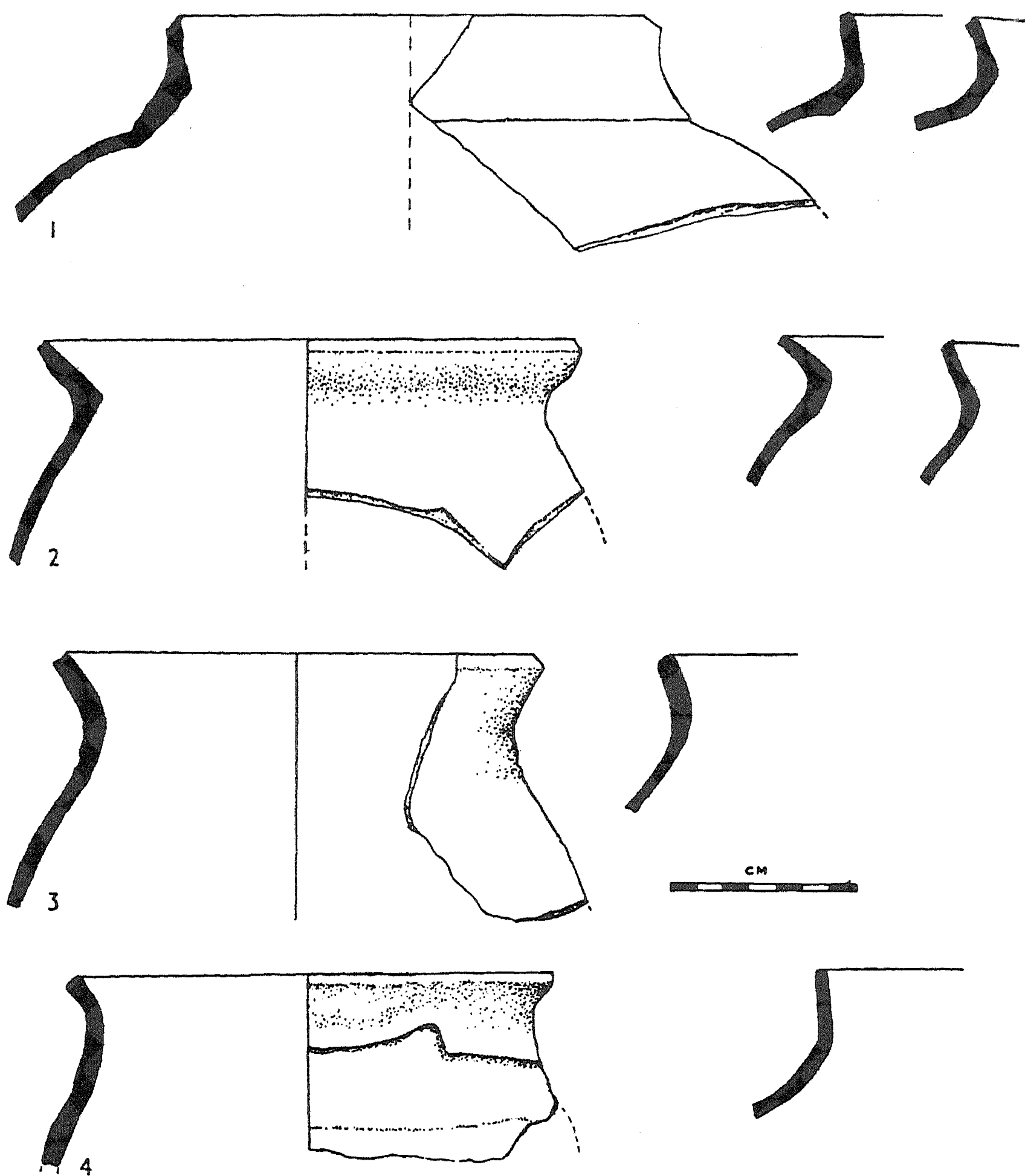


Fig.36a Vessel forms of Ahwene Koko wares found at Bono Manso

at Bono Manso. It is perhaps sufficient to suggest that the sherds found at Bono Manso were most probably imported from the Ahwene Koko area.

(i) General Characteristics - In general sherds belonging to Ahwene Koko area are very similar in terms of fabric, rim form, and decoration with phase III ware at Bono Manso. However the features which make Ahwene Koko sherds different are the following:

1. Even though the fabric is porous and contains quartz fragments and large flakes of mica just as phase III ware at Bono Manso, Ahwene Koko sherds are generally red-slipped. This red-slipping, quite unlike that of the Begho area, is very poorly done and the slip may peel off easily.
2. Generally Ahwene sherds are poorly fired and can be very crumbly.
3. There is a tendency for sherds to be heavy and more crudely made than phase III ware at Bono Manso.
4. Grooving is more in horizontal motif than the wavy-line motif which is common on phase III ware.

(ii) Vessel Forms - A total of 446 sherds of Ahwene Koko ware was found in the excavations at Bono Manso. Of these sherds 440 (98.7 per cent) came from Area 159 while only six sherds (1.3 per cent) came from Area 104; the other areas did not produce any sherd of this ware. Curiously all the sherds from Area 159 came from the J24 depression in a context which I have already considered as late Phase I deposit. The six sherds from Area 104 came from a phase II context. A total of 43 rim sherds was analysed and 9 forms emerged:

Form 1 (5 specimens): This form is a large spherical pot with a fairly constricted neck. The rim makes two sharp angles in the interior profile only. The lip is almost invariably grooved, though a few are rounded (fig.36a, no.1). The form is handsmoothed, though it is red-slipped, and

decoration is in the form of a horizontal groove on the neck. This form most certainly belongs to Boachie-Ansah's Ahwene ware II pot Form F (Boachie-Ansah, 1978).

Form 2 (17 specimens): This is an everted pot whose rim-neck joint is angular in the interior profile while the outer one is fairly smooth, though sharply curved (fig.36a, no.2). It has a grooved lip in all cases. Though burnishing occurs, handsmoothing is more common. Red-slipping is also a common feature though a few sherds are not slipped. No decoration is found on the rim sherds. It clearly belongs to Ahwene ware I pot Form A of Boachie-Ansah's classification (Boachie-Ansah, 1978).

Form 3 (4 specimens): This is a necked pot with a smoothly everted rim whose lip is grooved except one rim sherd which is rounded (fig.36a, no.3). Burnishing is present on one sherd but the other three are handsmoothed. The form contains an excessive amount of quartz fragments in the fabric and firing is very poor. A single horizontal groove decorates the neck in all cases. This form does not fit in any of Boachie-Ansah's classification and may seem to suggest that it is yet to be found at Ahwene Koko.

Form 4 (2 specimens): This is a nearly vertical necked vessel with a slight eversion. It is heavy and crude and in one case there is evidence of coil-mark in the interior surface. One sherd is red-slipped with a squared lip while the other sherd has clay lamination on the body and is notched, suggesting that it was used as a bukya (hearth pot)(fig.36a, no.4). Form 4 fits perfectly into Boachie-Ansah's hearth form A of Ahwene ware II.

Form 5 (1 specimen): This is an everted pot with a heavily constricted neck. The rim-neck joint is thick and it is angular in the interior profile (fig.36b, no.5). The lip is grooved. It is, as usual, red-slipped and poorly fired with a dark-brown core. Decoration is absent on this rim sherd which is identical with Bonoso ware pot Form D of Boachie-Ansah's classification.

Form 6 (3 specimens): An everted, necked bowl, this form is carinated at the mid-section and has a grooved lip. One specimen has a red-slip on both outside and inside surfaces while the other two are handsmoothed. Grooving is the main decoration and it is located mainly in the upper carinated section of the vessel. Horizontal and wavy grooves are the main motifs (fig.36b, no.6). Form 6 belongs to Ahwene ware II bowl Form F of Boachie-Ansah's classification.

Form 7 (7 specimens): This is a widely everted bowl with smoothly flowing body walls and a slightly bulbous body. The outer profile of the rim-neck joint is mainly smoothly curved but the inner profile may either be angular or smoothly curved (fig.36b, no.7). Red-slipping is found on the outer surface of all specimens. Two rim sherds have a horizontal groove each on the bodies while the rest are undecorated. This form fits exactly into Boachie-Ansah's Ahwene ware I bowl Form C(i).

Form 8 (3 specimens): This is a shallowly everted pot which is thick and heavy (fig.36b, no.8). Two specimens have rounded lips while one is notched. This form is neither burnished nor red-slipped, and it is also undecorated. It belongs to Ahwene ware I pot Form D of Boachie-Ansah's form analysis.

Form 9 (1 specimen): This is a spherical form with a narrow mouth (fig.36b, no.9). It is red-slipped and is both handsmoothed and undecorated. The form may belong to Boachie-Ansah's Ahwene ware II pot Form G.

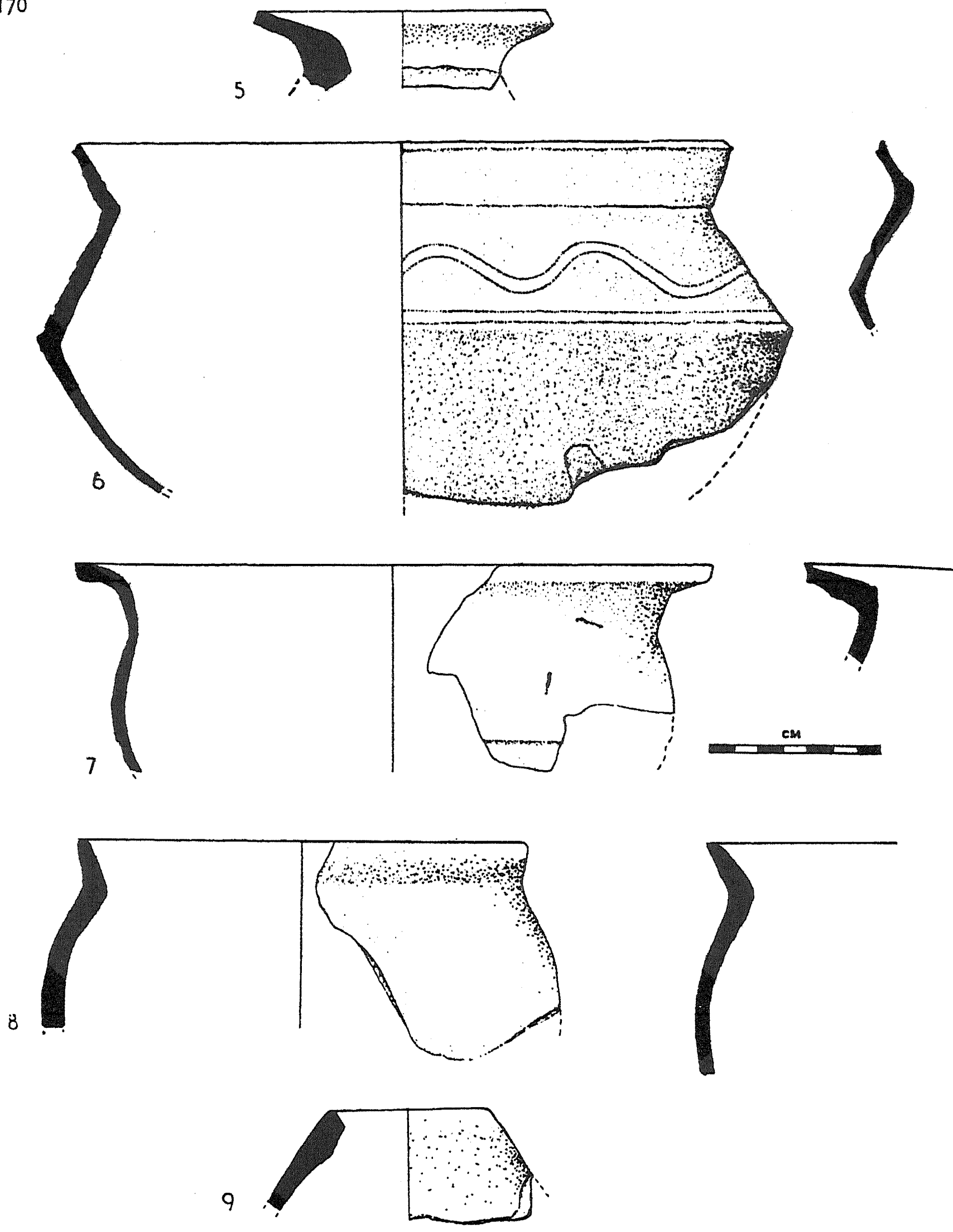


Fig.36b Vessel forms of Ahwene Koko wares found at Bono Manso

h. Miscellaneous:

A total of 28 sherds did not belong to any of the above wares, nor did they portray any recurring attributes to warrant a separate ware. Of these sherds, two forms are considered significant since they seem to have a relation with other wares described in Ghana:

Form 1 (2 specimens): This is a bowl-like vessel with a very short, upturned rim whose lip is rounded. It is grey and has a magnificently burnished surface. The fabric is well-fired and no quartz nor laterite fragments are visible to the naked eye. Decoration is in the form of a band of zig-zag comb stamp which is executed from the neck to the body (fig.35, Misc.No.1). A comparison of the fabric and form with Kisoto bowls of Northern Ghana (Mathewson & Flight, 1972) shows that the two are linked, though in terms of decoration this form found at Bono Manso is not usual with Kisoto bowls. It is also interesting to note that this form was found in phase II context, in Area 60 whose date, as will be shown later, is not inconsistent with the fifteenth and sixteenth centuries A.D. date for the occurrence of Kisoto bowls in the north (Mathewson & Flight, 1972).

Form 2 (1 specimen): This seems to be an open bowl. It is very well-fired and has an inner black core with laterite concretions in the fabric. It is well-burnished. Decoration is in the form of cuneiform stamp on the upper section of the rim (fig.35, Misc.No.2). A look at sherds from Bui and Bima which are in the Department of Archaeology, University of Ghana, Legon, reveals that cuneiform stamp is common, though the writer has not as yet seen any form which matches this miscellaneous form in the Bui and Bima pottery. The sherd was found in a phase III context in Area 104.

3. Comparison of Bono Manso pottery with those from other sites further south

So far only sites to the north and west of Bono Manso have been used for comparison. This does not mean that other sites have been ignored, but it is due to the unhappy archaeological vacuum that exists in the forest belt of Ghana. Although a few archaeological sites have been investigated, these have not produced adequate information about size, dating and pottery sequence. At best only surface finds or test pits have been conducted, making detailed comparative studies difficult.

Studies of the available pottery in the Ghana National Museum and the Museum of Archaeology at the University of Ghana, Legon, were made of the following selected key sites (see fig.3):

NAME OF SITE	REGION	LOCATION
1. Mamponen	Asante	6°47'N, 1°34'W
2. Ahinsan	Asante	6°20'N, 1°31'W
3. Mankesim	Central	5°15'N, 1°02'W
4. Asebu	Central	5° 8'N, 1°12'W
5. Ayasu	Greater Accra	5°40'N, 0°18'W
6. Akim Manso	Eastern Region	5°55'N, 0°45'W

It is not intended to describe in detail pottery from each of the above sites. Only a summary of the available information concerning any links or otherwise of the sites with Bono Manso will be made here.

Ahinsan which is a funerary site turned out numerous terracotta heads (Davies, 1956; Calvocoressi, 1970). Pot sherds associated with these are generally poorly fired, thick and heavy. Some are however very carefully burnished and smudged. There is a tendency for the pottery to be decorated

with curvilinear grooves and embossed designs. In general pottery from this site bears no direct resemblance to wares from Bono Manso.

Mamponden is said to have been an ancient market which was particularly frequented by traders who were afraid to enter Kumasi which was always considered unsafe for foreigners (Davies, 1955). The pottery is generally smudged and well-burnished and the pots are characterised by sharp everted rims whose interior surfaces are grooved in a banded form. Similarly, pronounced carinated, incurved bowls are very common. Lips are rounded in most cases. Outside decoration is mainly grooving, usually in curvilinear motifs. Phase II ware, Form 11 is remarkably close to the pottery from the middle market midden (Davies, 1955). However, of all the sites in the Bono Manso area Amuowi II pottery are almost identical to the bulk of Mamponden pottery, although there is a greater elaboration on the latter than the former (Effah-Gyamfi, 1974, 202-225). A date of 1610 ± 80 a.d. (N-1802) for the lower occupation at Amuowi II is close to Wilks' suggested date of 1680-1730 A.D. for the life-time of Mamponden (see Ozanne, 1976, 53).

At Bono Manso the vessel form which shows a link with Mamponden and Amuowi II pottery, is in a context which may be either a little earlier or contemporary with the two sites of Mamponden and Amuowi II as will be shown in the next chapter on chronology. While it is dangerous at this stage of our knowledge to suggest the direction of influence on the pottery from the three sites, it is perhaps reasonable to suggest that Bono Manso cultural relationship with the Asante area became much more conspicuous in the archaeological record from about the late seventeenth century A.D.

According to traditions from the Fante area, the Borbor Fante who speak of having migrated from the Bono Manso area settled first at Kwaman and then later some migrated to Mankesim (Fynn, 1975b). A study of the pottery from

Mankesim excavated by Nunoo shows that from the nature of forms, surface finish and decoration, only superficial relationships exist with Bono Manso in terms of banded curvilinear grooves, and squared or grooved lips. As has been noted above these characteristics combined are common mainly in the phase III context at Bono Manso. While not doubting that there is some substance in the tradition of Fante-Bono relationship, the available archaeological evidence is too slight to be of any help.

This situation also applies to the pottery from Asebu, excavated by Nunoo (Nunoo, 1957) where heavy, crude pots with incurved bowls whose lips have banded grooves either in horizontal or curvilinear motifs, were recovered. Other decorations of single and double bosses, zig-zag line, chevrons and cuneiform stamps are very different from the main decorations at Bono Manso, although a fragment of carved ivory bracelet (Nunoo, 1957, fig.3a, 14) is almost identical with two specimens found at Bono Manso.

Ayaso, traditionally remembered as the early site of Ga Mashi where the first five Accra chiefs are said to have ruled (Reindorf, 1895, 5-12) was excavated first by Owusu and later by Ozanne (Ozanne, 1962, 51-70). Unfortunately no detailed report of the pottery has been published; Ozanne relied more heavily on the tobacco pipes to erect a chronological framework for the Accra area and less on the pottery assemblage. A look at the Ayaso pottery collection in the Archaeology Department of the University of Ghana, Legon, reveals two significant wares: the first is a highly burnished and smudged ware of which bowls have banded grooves concentrated on the interior surface of the rim just as those found at Amuowi II and Mamponten described above. The other is a very well-fired, thin ware which has squat, everted pots whose inner rim profiles are conspicuously angular

though the outer profile may be less sharp. Rim lip is consistently grooved on the second ware and the bodies commonly contain banded grooves. As noted, the first ware resembles wares at Amuowi II and Mamponden which may date to between the seventeenth and eighteenth centuries A.D. The second ware is close to phase III ware of Bono Manso.

As yet there is no detailed information about any former connection between the Bono Manso area and the Accra area, though oral tradition from Takyiman links the early Ga settlers at Osu with the Takyiman area. As Quaye points out, "the Ga of today are a complex mixture of peoples and cultures which had gradually fused into a system with distinct characteristics" (Quaye, 1972: 13). On present evidence alone one may say that a connection between the two areas, at least by the seventeenth century A.D., is apparent. The evidence from fabric and texture however, suggests that there was no direct import of pottery from the Bono Manso area, but that perhaps there was a group of potters in the Ayaso area who had cultural affinities with the Bono Manso area.

In detail there does not seem to be any relationship with pottery from the Akim Manso earthwork site (Kiyaga-Mulindwa, 1975: 90-91), though Form 7 of phase I ware at Bono Manso is very similar to the bulk of pot forms which show pronounced ridges on the rims.

From the foregoing analysis it appears that the cultural relationship between Bono Manso and the other sites further south mentioned above, was minimal, if present at all, in the Bono Manso phase I occupation, but that this seems to have increased remarkably during the phases II and III occupations, particularly the latter. On the other hand there is a clear evidence that during the phase I occupation, active culture contacts were

going on between Bono Manso and areas further north of it. The evidence seems to suggest, therefore, that the phase I occupation was the period when Bono Manso looked "northwards" while during the two later occupations it began to look "southwards" too.

SECTION B: CERAMIC FINDS OTHER THAN VESSELS

1. Smoking Pipes (figs.37a-37c)

Since Ozanne produced a typology of smoking pipes in the Accra area (Ozanne, 1962, 1976), archaeologists have paid considerable attention to pipe fragments in archaeological contexts. Smoking pipes have been valuable chronological indicators of the period of the seventeenth and eighteenth centuries A.D., a period for which radiocarbon dating is not very helpful. Using written records, oral traditions and archaeological imports, Ozanne has made a chronology of pipe types in the Accra area. The attributes used in the Accra area were next applied to smoking pipes from Yendi Dabari (Shinnie & Ozanne, 1962). Similar studies have since been made of pipes from Twifo Heman (Bellis, 1972), New Buipe (York, 1973) and more recently from Begho (Afeku, 1976).

In view of their use as "type fossils" in archaeological contexts a campaign was launched for the collection of smoking pipes from Bono Manso and neighbouring archaeological sites. This campaign was very successful and a large number of pipes and other archaeological objects found mostly on the surface and during farming were donated by local inhabitants. For the purpose of making a more detailed typology of smoking pipes in the Bono Manso area, it is proposed to analyse not only the pipes from Bono Manso but also surface and excavated pipes from neighbouring sites, particularly those from Amuowi II which was excavated by the writer in 1973 (Effah-Gyamfi, 1974).

A total of 347 smoking pipes was collected both on the surface and in sealed archaeological contexts in the Bono Manso area. Of this number 109 were highly fragmented and were therefore excluded from the analysis. Twenty-nine of those analysed were nearly whole or whole pipes, and this helped a

great deal in the typology. But since many of the pipe fragments cannot be easily compared with the whole pipes, all the pipes will be analysed in their relative parts of base, bowl, stem and collar as well as the main decorations on them, and an attempt to correlate them will be made. Since almost all the pipe parts were represented fairly evenly at Areas 60, 104, 159 and 245, it has been decided not to make spatial correlations unless an exceptional observation is made.

i. Base Typology:

Broadly six styles can be distinguished among the bases of the pipes recovered in the Bono Manso area. These are:

- (a) Flat bases.
- (b) Ring bases.
- (c) Segmented bases.
- (d) Foliate bases.
- (e) Triangular bases.
- (f) Round bases.

(a) Flat bases - Bases in this category have no distinct foot rings which separate the bowls from the bases; the two parts take the same dimension. Whole pipes in this category have stems joining the bowls at nearly right angles. Two main sub-divisions may be made in terms of size: 1. small flat bases with an average diameter of 29mm; and 2. large flat bases with an average diameter of 37.3mm (fig.37a-a1,a2). While the former is typical of this base category, the latter deviates a little in having a low ring averaging 4mm separating the bowl from the base. Bowls associated with the latter are decorated with incised bands of comb stamp while the former

BASES

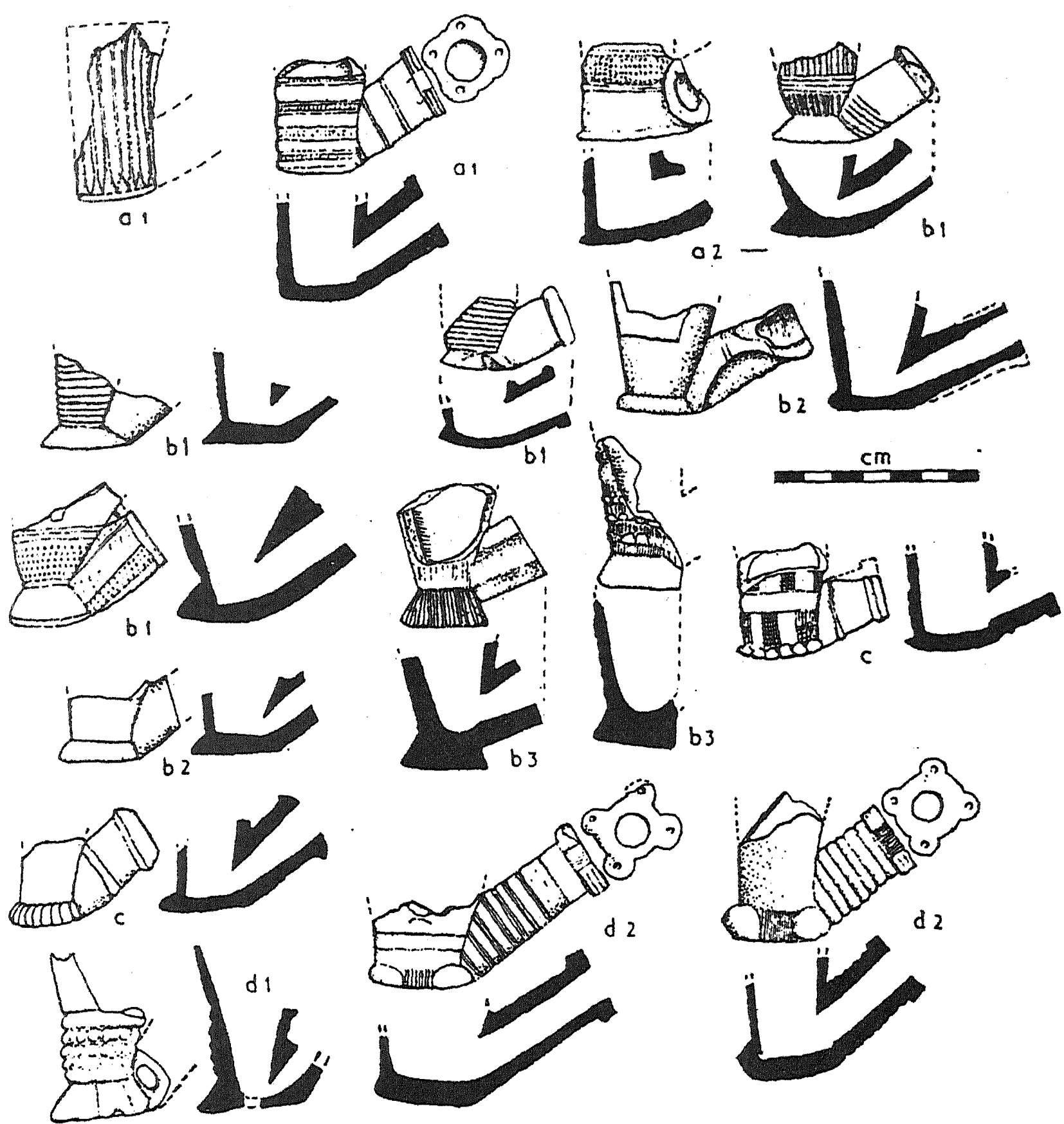


Fig.37a Smoking pipe typology

may have incised bands or vertical cordon. It is interesting to note here that the big flat types are mainly found in phase II contexts, while the small types are found mainly in phase III at Bono Manso.

(b) Ring bases - In this category there is a pronounced ring or platform separating the bowl from the base. The underside of the stem joining the base is plain. Two sub-divisions may be made on the basis of surface finish and height of the rings.

1. The first has a higher ring, averaging 7mm from the base to the bowl-joint (b1 in fig.37a). It is very carefully red-slipped and burnished with a band of encircling grooves on the underside of the stem adjoining the base, or a series of sawtooth impression on the bowl.
2. On the other hand the second sub-type has a low ring averaging 4.5mm and it is not red-slipped though it is carefully burnished (b2 in fig.37a). Unlike the first sub-type this one has no decoration on the bowl and only a single excised band may be found on the stem. It is again important to note that while the excavated specimens of the first sub-type are found almost exclusively in a phase II context at Bono Manso, the second sub-type is found on the surface, while at Amuowi II it is found in a lower occupation.

A third sub-type has a very high platform or foot ring, averaging 11mm (b3 in fig.37a). It differs also from the above two sub-types in having a double angle instead of the single angle common with the first two. While one was found on the surface at Asekye I, the other was found in the lower

occupation at Amuowi II.

(c) Segmented bases - This is distinguished from foliate bases in having more than four lobes. In this type of base, segments are demarcated by short, narrow grooves. Pipes with segmented bases may vary from possessing a total of six lobes to possessing as many as twenty-eight (c in fig.37a). While some specimens with stems attached have quatrefoil collars, others may have sharp angular collars. All specimens in this category are however well-burnished but not red-slipped. Those with bowls and stems attached are generally undecorated though in two cases incised bands and finger-nail impressions are found on the bowls. This base form is restricted to the phase III occupation. The only specimen from Amuowi II was a surface find.

(d) Foliate bases - This base form may have three or four lobes but not more. It is the most popular of all the base forms. On the basis of size, number and shape of lobes, four sub-groups may be distinguished:

1. Bases with pointed or star-shaped lobes (d1 in fig.37a). They are well-burnished but without red-slip. All the bases with stems have sharp collars and two bands of incised lines may be found on the underside of the stem though they are generally undecorated. One specimen has pointed knobs on the bowl. The specimens from excavated contexts at Bono Manso both came from phase II and III deposits. The only other excavated specimen came from the lower occupation at Amuowi II. While the two specimens from the phase III deposits came from Area 60, the only specimen from phase II came from Area 159.
2. Bases with four rounded lobes in between which are short vertical incised lines. Although red-slipping may be found

they are generally only burnished. All the bases with bowls and stems attached show that the collars also possess quatrefoil lobes (d2 in fig.37a). Most of the specimens in this sub-type are decorated with bands of excised lines on the stem and bowl, though one or two have comb stamp on the stem only. Except for two specimens which came from a phase II context, the bulk of them came from either the surface or from a phase III context. None of the specimens in this sub-type came from Amuowi II.

3. Bases with four rounded lobes but which are far smaller in size than sub-type 2 above. The lobes are also less pronounced than sub-type 2 above. Bases of this sub-type which have stems attached have quatrefoil collars just as sub-type 2 though here too, the lobes are less pronounced (d3 in fig.37b). At Bono Manso the specimen in this sub-type came from the surface while at Amuowi II they were found in the lower occupation deposits.
4. Bases with three rounded lobes only. Only two specimens were recovered. They have well-burnished bowls which are both undecorated while the stems have a band of incisions on each specimen. The collars attached to the stems are very sharp in profile (d4 in fig.37 b). The specimens were recovered in a phase III context at Bono Manso only.

(e) Triangular bases - This form has a small, flat base of roughly triangular form. All the specimens were well-burnished and smudged; none had any red slip. Three specimens were complete and they showed spherical, semi-carinated bowls with elaborate decorations in the form of bosses and

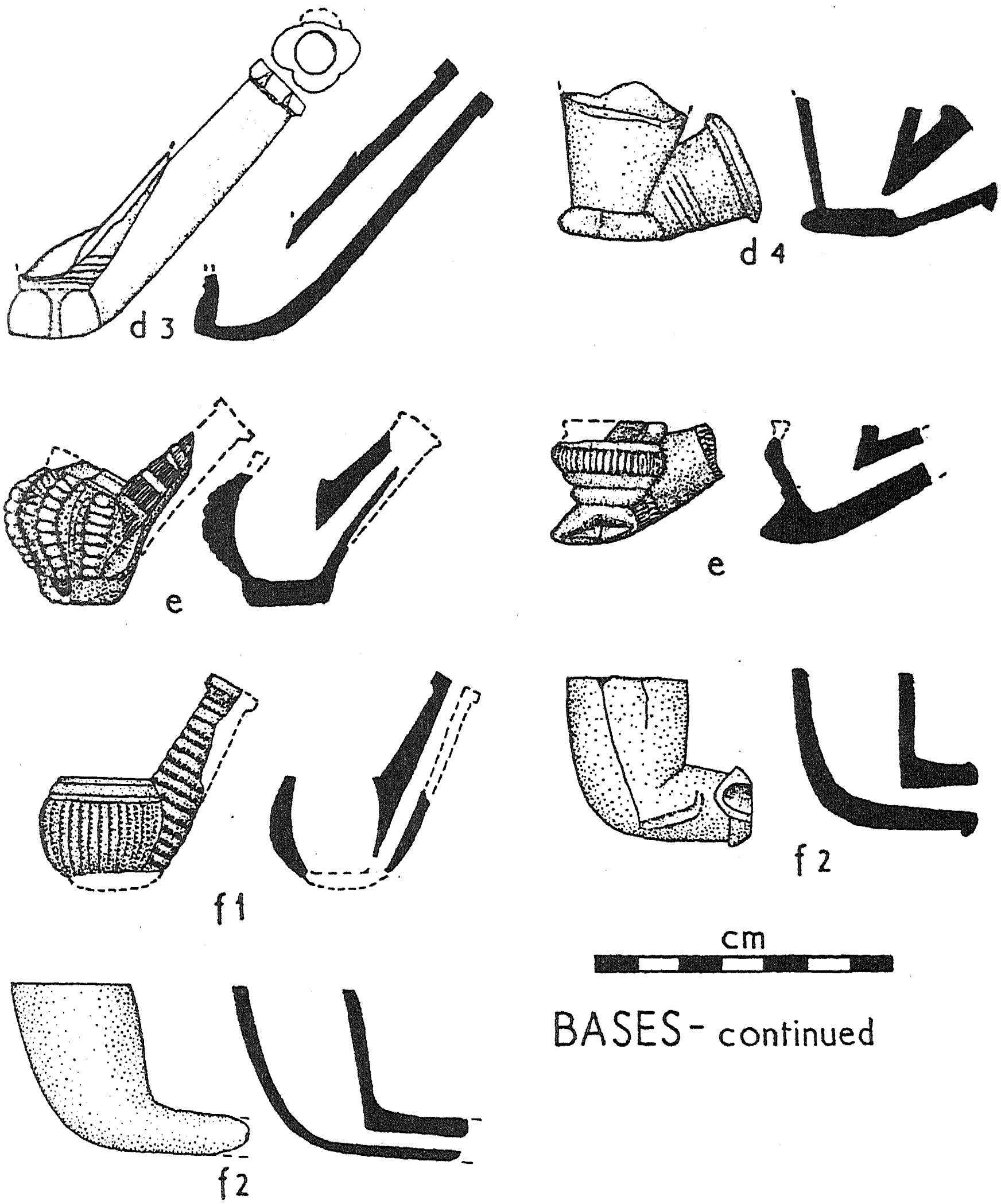


Fig.37b Smoking pipe typology

finger-nail impressions. The stem-bowl junction is sharp and the collars are either long and rounded or squared (e in fig.37b). Except for one specimen which was donated at Bono Manso as a surface find, the provenance of which is not known, all the four other specimens were recovered from Amuowi II in the upper occupation deposit.

(f) Round bases - Two sub-types may be distinguished here:

1. The base of the first sub-type is difficult to determine but judging from the curvature of the bowl towards the base it may be round. The bowl is very low and is bulbous and hemispherical. The stem which joins the low bowl at an acute angle is consistently decorated with saw-tooth impression all over. Some specimens have knobs interrupting the saw-tooth impressions on the stem. The collar is squared. The bowls may either be perfectly burnished with rosettes and finger-nail impressions or possess vertical incisions interlaced with saw-tooth impression (f1 in fig.37b). Only one specimen came from the surface at Bono Manso; the rest were mainly found in the lower occupation at Amuowi II.
2. The second sub-type may be better called an elbowed type and is reminiscent of Ozanne's type I for the Accra area (Ozanne, 1962). Only one local type was found at Bono Manso on the surface (f2 in fig.37b). The rest were imported kaolin pipes which came from the upper occupation deposit at Amuowi II

ii. Bowl Typology:

We may distinguish four broad types of pipe bowls in the Bono Manso area:

- (a) Drum-shaped.
- (b) Flared.
- (c) Spherical or roughly carinated.
- (d) Hemispherical.

(a) Drum-shaped bowls - Only three specimens of this type were recovered. The mid-section of this form bulges out but narrows towards the base and the lip. It is also characterised by a sharp eversion of the lip which is squared. The form is also carefully burnished but red slip is absent on it. Decoration is in the form of vertical incisions and saw-tooth impression located on the lower half of the bowl (a in fig.37c). This is a typically phase II form, none of which came from Amuowi II.

(b) Flared bowls - This form is the most popular in the Bono Manso area. The bowl widens gradually upwards until the ratio of the lip-end to the mid-section of the bowl is about 5:3. Three sub-types may be distinguished based on size, shape, decoration and stratigraphic context:

1. This form has a thickened lip in relation to the body wall in a ratio of about 2:1 (b1 in fig.37c). The lip is squared. It has saw-toothed impression on the bowl which may be both burnished and red-slipped or only burnished. Of the twelve specimens excavated from Bono Manso only one was found in a phase III context; none came from Amuowi II.
2. This form is lighter than 1 above. The lip and body walls are almost equal in thickness, quite unlike the first sub-type (b2 in fig.37c). Although very well-burnished, it has no red-slip nor is the bowl decorated, except a single

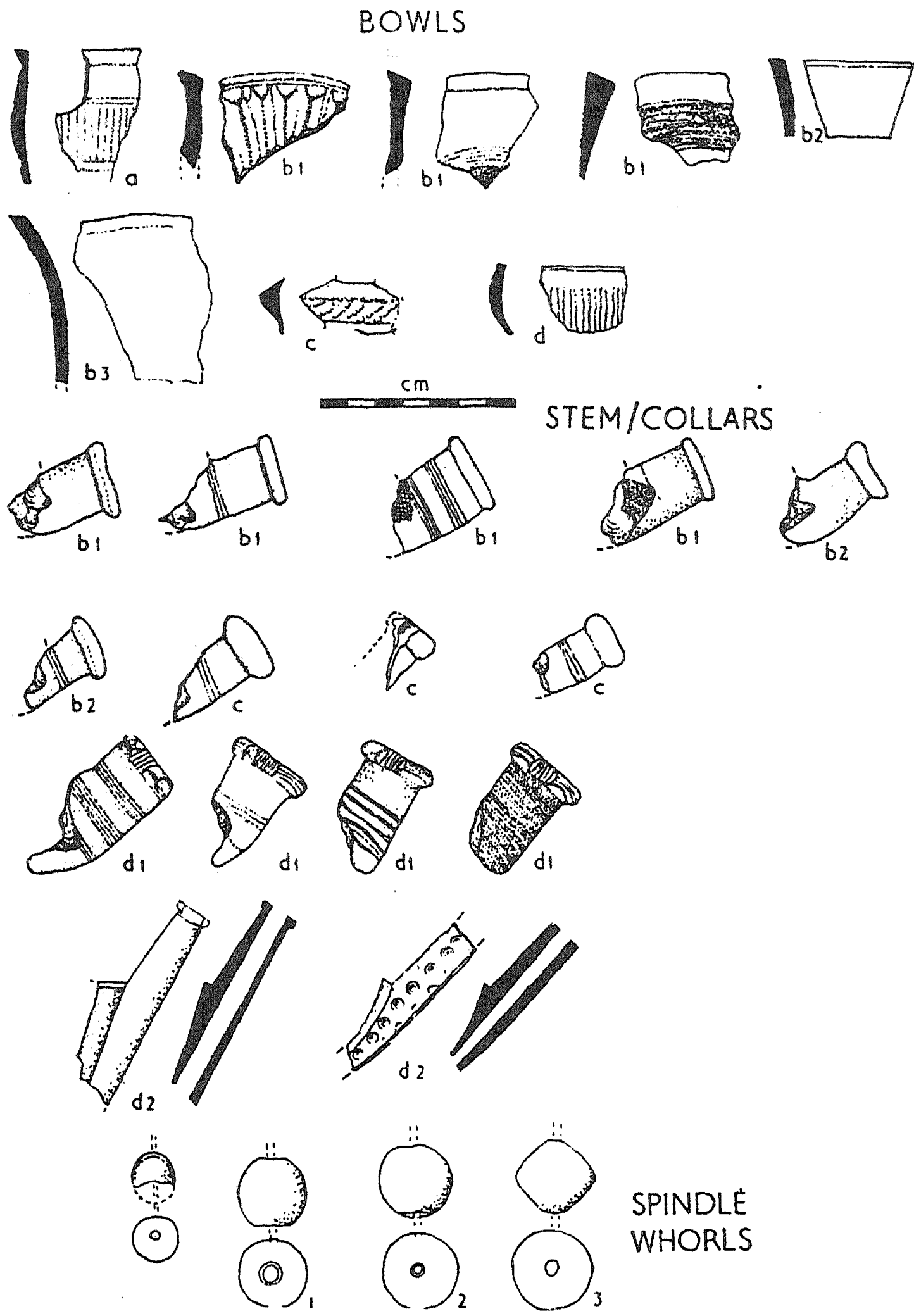


Fig.37c Smoking pipe typology

incision just 4mm below the lip which is squared. All the excavated specimens from Bono Manso came from a phase III context. The single specimen from Amuowi II came from the lower occupation.

3. This is similar to sub-type 2 in weight and lip-body thickness. It is also undecorated except the single incision located about 4mm below the lip. Unlike sub-type 2 however, red-slipping may be found on the bowl and it also has a characteristic inward bevel of the lip (b3 in fig.37c). All the specimens excavated were in a phase III context at Bono Manso; none came from Amuowi II.

(c) Spherical or semi-carinated bowls - All the bowls of this type were attached to stem and base. They belong to the triangular based pipes described above (c in fig.37c). As noted already, they were mainly found in the upper occupation at Amuowi II. Two bowl fragments were however discovered in phase III contexts at Bono Manso.

(d) Hemispherical bowls - This form also belongs to the first sub-type of round bases described above (a whole specimen was recovered) and need not be repeated here (see f1 in fig.37b). Except one specimen from a phase III context and another one on the surface at Bono Manso, all the rest came from Amuowi II in the lower occupation deposit. It is again worth remarking that the specimens from Bono Manso came only from Area 159.

iii Stem/Collar Typology:

Largely on the basis of collar, five broad types may be distinguished as follows:

- (a) Plain collar.
- (b) Angular collar.

(c) Wide, rounded collar.

(d) Quatrefoil collar.

(e) Squared collar.

(a) Plain Collar - Only three specimens with this form were found. The stem terminal ends abruptly and it is squared (see b3 in fig.37a). One specimen was found on the surface at Asekye I. The other two specimens were excavated at Bono Manso, both in a phase II context. These three specimens are different in their overall shapes from the bulk of pipes from the Bono Manso area. One possesses elaborate rosaries on the bowl and stem (b1 in fig.37a). It resembles Ozanne's type 2(b), though this one is single-angled (see Ozanne, 1976). The second specimen is also double-angled, an uncommon trait in the Bono Manso area. The third specimen has a plain stem and is single-angled. The two specimens from an excavated context at Bono Manso were of phase II derivation.

(b) Angular Collar - Two sub-divisions may be made here:

1. Stems whose stalk-end profiles are flat and sharp but whose outer profiles are angular. Stems in this sub-division are mostly decorated with saw-toothed impression, particularly at the undersides of the stems and they also possess one or two excised bands encircling the stems (b1 in fig.37c). While all those recovered as surface finds only have excised bands and cuneiform stamps and are only handsmoothed, those recovered in excavated contexts at Bono Manso were not only well-burnished and red-slipped or burnished but they were also found mainly in a phase II context. Only one specimen was found on the surface at Amuowi II.

2. Stems in this sub-class have their stalk-end curved, but also show angular outer profiles (b2 in fig.37c). They are all carefully burnished and are either plain or decorated with a band of encircling grooves. Four specimens were donated as surface finds from Bono Manso; three came from phase III contexts, three from phase II contexts, but none came from Amuowi II. All the three specimens from phase II came from Area 60. Two of the phase III specimens came from Area 159 while the other one came from Area 104.

(c) Wide, Round Collar - These are similar to sub-type (b) above except that the collars are wide and rounded rather than being angular. They also possess the encircling grooves characteristic of sub-type 2 above (c in fig. 37c). Most of the specimens were picked from the surface at Bono Manso but a few were found in both phase II and III contexts. The three specimens from Amuowi II were burnished and smudged and were in upper occupation deposits.

(d) Quatrefoil Collar - These may also be sub-divided into two based on size and decoration of the collars:

1. Large stems with four pronounced lobes. On all the lobes, one or more incisions may be found. Vertical incisions may also be found between two lobes (d1 in fig.37c). Decoration is either a band or bands of excised lines encircling the stem or an overall decoration of saw-toothed impressions. Red-slipping may be found against a burnished background, but specimens which are only burnished are predominant. This form is the most popular, found almost

exclusively in phase III or on the surface at Bono Manso.

It is also present in the lower occupation at Amuowi II.

2. These have smaller stems than sub-type 1 above. They also have lobes on which no incisions are found at all (d2 in fig. 37c). Most of them are red-slipped and burnished. At Bono Manso two specimens were from a phase III context and three specimens were surface finds, while those from Amuowi II were mainly in the lower occupation deposit.

(e) Squared Collar - These are related to sub-type 1 of round-based forms and of hemispherical bowls (a complete specimen was found). As noted above, the stems have an overall decoration of saw-tooth impression, sometimes interrupted by embossed or knobbed designs. In some cases however, round spirals may occur on the stem (f1 in fig.37b). The squared terminals do not possess any lobes. None of these stems came from Bono Manso, but all the specimens came from the lower occupation at Amuowi II.

iv. Correlations and Results:

From the analysis, the following observations may be made. Firstly double-angled pipes are very rare at Bono Manso; ring and flat-based pipes predominate. The double-angled pipe from the surface at Asekye is very similar to those found at Yendi Dabari (Shinnie & Ozanne, 1962, fig.6, No.2, 99). The one at Amuowi II which was in a dated context has no direct similarity in terms of decoration, with any double-angled pipe so far published (see Ozanne, 1962; 1976; Shinnie & Ozanne, 1962; York, 1973; Afeku, 1976). Secondly, hooked pipes are also very rare in the Bono Manso area. The only pipe with a hook is single-angled with a flared bowl and a plain collar. It has a completely different decoration from the bulk of

the pipes. From where it originally came, it is difficult to determine. Hooked single-angled, ring-based pipes have not been reported from either Yendi Dabari or Begho. The most likely source may be the Accra area where a similar form has been found, though this pipe from Bono Manso differs significantly from the Accra types in size and decoration. Similarly, like Begho (Afeku, 1976) round-based pipes, both local copies and imported ones, seem to belong to the latest types of pipes in the Bono Manso area. In fact no imported round-based pipe was picked from Bono Manso, indicating that at the time of abandonment, pipes imported directly from the coast had not reached the inhabitants in this area.

It is also worth remarking that none of the pipe types found in the phase II occupation is represented in the Amuowi II assemblage. On the other hand, some, though not all, of the types found at Bono Manso, either on the surface or in phase III contexts, are mainly in the lower occupation at Amuowi II. In addition, some characteristic types of the upper occupation at Amuowi II, such as imported round (elbowed) and triangular-based pipes, are not found at Bono Manso. All the above evidence therefore suggests that while the lower occupation at Amuowi II is contemporary with the phase III occupation at Bono Manso, the upper occupation at the former site post-dates the life-time of the latter.

Following from this observation one may conclude, in view of the presence of decorations such as knobs and bosses, spherical, hemispherical bowls and triangular bases, smaller acute angled stems and smudging at Amuowi II - characteristic attributes which are almost completely absent at Bono Manso - that pipes in the area began to assume different stylistic characteristics after the final occupation at Bono Manso. These different

characteristics are similar to Ozanne's Accra Type 4 (Acheampong type) which he estimates to have been introduced after 1724 (Ozanne, 1976, Appendix, 50-54). It is also in keeping with Davies' find of a similar type associated with European pottery at Mamponden which is estimated to fall into the early eighteenth century A.D. (Davies, 1955, 7). The same may be said of Afeku's estimate of 1700-1740 for his Type 5 which coincides with the Amuowi II finds. All these estimated dates are strikingly in line with the destruction of Bono Manso which has been dated to between 1722 and 1724 by the West India Company letter (Furley Collection), and by Kitab Ghunja (Goody, 1954).

Thirdly it is clear from the analysis above that except two tiny fragments of pipes which were almost certainly intruded from above, smoking pipes are completely absent in the phase I deposits at Bono Manso. While the writer is cautious in accepting the claim that smoking was introduced to West Africa (see Afeku, 1976, 24; Ozanne, 1962, 59), in view of traditions collected by him which indicate that smoking of local herbs in wooden pipes was earlier than smoking in clay pipes, the evidence here suggests that clay pipes post-date the early phase of occupation at the capital site. In this connection it is very curious to note that the double-angled pipe found on the surface of Asekye I site was associated with only Phase I sherds.

On the other hand, pipes were found in the two later occupations and were more common in the final phase at Bono Manso. Even though some forms occur throughout the two later phases, other forms are restricted to each phase. The description given above allow the following sequence of the pipes in the Bono Manso area:

Phase II types:

Flat bases (large sized) sub-type 2, flared bowls, thick-lipped, decorated with excised bands or saw-toothed impressions and sharp-angled collars (see fig.37a, a2; 37c, b1, b2 respectively); Ring bases, sub-type 1, flared bowls, thick-lipped or drum-shaped with sharply everted rims and sharp-angled collars; (fig.37a, a1; 37c, a and b1, b2 respectively); Ring bases sub-type 3 (double-angled) flared bowls with plain collars; (fig.37a, b3; 37c, b3 b1 respectively); Ring bases sub-type 1, hooked with plain collars (fig.37a, b1, b3 respectively).

Early Phase III types:

Flat bases, sub-type 1, flared bowls with excised bands only, stems with sharp-angled collars (see fig.37a, a1, 37c, b1 and 37c, b2); Flat bases sub-type 1, flared bowls with excised bands, stems with quatrefoil collar (see fig.37a, a1; 37c, b1, 37c, d1); Ring bases sub-type 2, flared bowls with squared lips, stem with either wide, round collars or angular sharp collars (fig. 37a, b2; 37c, a and c, 37c, b1); Segmented bases, flared bowls generally undecorated or with excised bands, stems with quatrefoil or sharp angular collars (fig.37a, c; 37c, b2, b3); Foliate bases sub-type 2, flared bowls undecorated, stems with sharp angular collars (fig.37a, d2; 37c, b3, b2); Foliate bases sub-types 1 and 4, flared bowls decorated with excised bands or saw-tooth impression, big stems with excised bands or comb stamp and with pronounced quatrefoil collars (fig.37a, d1; 37c, d4, 37c, b1, d1).

Late Phase III types:

Foliate bases sub-type 3, flared undecorated bowls with squared or inwardly bevelled lips, stems plain and at acute angle with bowls and with

small quatrefoil collars; (fig.37b, d3; 37c, b3, d2); Round bases sub-type 1 with hemispherical low bowls decorated with saw-tooth impressions and interrupted with knobs or bosses; stems also decorated with all-over saw-tooth impressions and knobs or bosses, with squared collars (fig.37b, f1; 37c, d1, d2).

Pipes post-dating Bono Manso site:

Triangular bases with spherical or roughly carinated bowls elaborately decorated with knobs or bosses, plain or bossed stems with wide, rounded collars (fig. 37b, e; 37c, c and d); Round bases sub-type 2 (elbowed) European Kaolin and local copies with hemispherical, cup-shaped bowls and squared lips and plain undecorated stems (fig. 37b, f2; 37c, d2 respectively).

v. Comparison of Clay Pipes from the Bono Manso area with those from other sites in Ghana:

As double-angled pipes are extremely rare in the Bono Manso area, one may argue that the few found there may have come from any of the Accra, Yendo Dabari, Begho and New Buipe areas, though they seem to be more akin to the northern than the Accra ones.

The analysis above has confirmed that foliate types post-date flat or ring-based pipes (Ozanne's flat types), though the latter continued to be made with the former. Some of the early and late phase III pipes at Bono Manso as well as those post-dating Bono Manso are clearly paralleled in the Mamponden pipes (Davies, 1955, figs.27,28). Davies has dated these pipes to the early eighteenth century A.D. Segmented and star-based pipes were not found at Mamponden, suggesting that these preceded the quatrefoil-based ones (though it is not yet possible to know whether segmented bases preceded star-shaped ones or not - see York, 1973,34). In any case the phase II group of pipes at Bono Manso is absent at Mamponden.

The hooked, single-angled, ring-based pipes may be paralleled with pipes from the Accra area since hooking is a characteristic feature there. Ozanne dates these hooked flat-based types to before 1677 A.D. (Ozanne, 1976,27). The fact that this type was found in a phase II context at Bono Manso suggests that if the pipe was indeed imported from the coast, then phase II may date "before 1677". However, the fact that his earliest, round-based type is the latest in the Bono Manso typology may suggest that such a neat chronology as proposed for the Accra area, may not be applicable to the Bono Manso area. Indeed this observation has also been made by Afeku regarding pipes in the Begho area (Afeke, 1976, 34). As is the case with the Begho area, ring or flat-based pipes are clearly earlier than Ozanne's Type 1 (round-based types). Ozanne admits that his Type 2(a) (flat-based types without hooks) began suddenly in the Accra area, and has suggested that it is a "northern" type. This suggests that the dates assigned to it may not be applicable to the Bono Manso and Begho areas where the same types are clearly earlier. The writer suggests that the hooked variety in the Accra area may be a copy of this imported "northern" type rather than being strictly an evolutionary trend as Ozanne seems to imply. In addition it is suggested that, since the evolutionary sequence of the Accra area is not applicable to the Bono Manso area, the dates Ozanne suggests cannot be applied here. For this reason it is difficult to accept Shinnie's and Ozanne's classification of the Yendi Dabari pipes which was based principally on the coastal sequence. Indeed there is no basis for taking double-angled pipes to be earlier than single-angled pipes, since as has been shown in the Begho analysis by Afeku, the two were found in the same stratigraphic sequence (Afeke, 1976). It is most probable that the direction of influence and time-depth of the local pipes

in the coastal areas were different from those of the interior. While it is reasonable to accept Ozanne's hypothesis that the coastal area was influenced by the introduction of tobacco by the Dutch in about 1640 A.D., it does not automatically follow that this date should be the earliest in the interior. Indeed, the presence of clay pipes does not necessarily indicate tobacco smoking. Traditions collected by the writer in the Bono Manso area and by Boachie-Ansah (personal communication) in the Wankyi area are strong in pointing to an earlier use of wild plants which were smoked earlier in wooden pipes or in clay pipes (see also Lebeuf, 1963, 599). For this reason it would be rash to associate clay pipes only with tobacco smoking. While not doubting the value of smoking pipes as a chronological indicator, one should be cautious when using this dating method alone. For the circumstances and dates of smoking in various parts of West Africa may differ significantly.

On present evidence, one can only say that on purely typological grounds Bono Manso shared significant cultural parallels (and therefore perhaps contacts) with the Mamponden area during the late phase of its occupation. That there were vigorous contacts between the Middle Niger and the Bono Manso area cannot be disputed. Yet in terms of smoking pipes one cannot be certain of direct influences from the Middle Niger area. Both in form and decorations the pipes from Mali are completely different from those in the Bono Manso area, except a few phase III types which can be paralleled with others from Sansanding (Daget & Ligiers, 1962, fig. 18, Nos. 2, 9 & 11). It is true that tobacco was an important trade item in the Mande trade with the people of modern Ghana and this resulted in the Twi-speaking people adopting the word Tawa which may have been derived from the Mande word Taba for tobacco (Wilks, 1962). Yet this may not necessarily mean that smoking in pipes came with tobacco. For, apart from adopting this

word, there is yet another Twi word, abua (smoking pipe) which may have been superseded by the former, perhaps due to the later increase in the tobacco trade.

2. Spindle whorls:

Fifteen spindle whorls were excavated from Bono Manso and these fall into three distinct types: spherical, flat-based spherical, and carinated (fig.37c). Except for two specimens which are handsmoothed, the rest are very carefully burnished of which four are fired black. They range between 17mm and 25mm in diameter with the mode at 25mm. All but one of the fifteen specimens were pierced from top to bottom, with an average bore diameter of 4mm. The other specimen which is a spherical type is very small (with a diameter of 15mm) and it has only been pierced halfway through. Only one specimen was decorated with a groove in the mid-section; all the rest were undecorated. Except for the flat-based spherical type which was found only in a phase III context, the other two types were found stratified in the three phases of occupation. It is interesting to note that the small, half-pierced type was found in the single phase of occupation at Area 139. York also recognised a similarly small type in the period 2 occupation at New Buipe which however was not pierced at all (York, 1973, 50). It is too early to suggest from these two examples that spindle whorls increased in size through time. However it is important to note that this industry can be traced back to the early phase of the settlement at Bono Manso.

It is difficult to tell the source of the weaving industry in the Bono Manso area. Local traditions are not clear. While some informants claim it is indigenous, others claim that it was introduced by the Ndwila (Dyula-speaking) people from the Middle Niger area. I have suggested elsewhere

(Effah-Gyamfi, 1974, 70) that the Bono word 'gyaneboo' (spindle whorl) may have been derived from the Dyula word dzenne for the same object (see also Crossland, 1975, 71).

CHAPTER VIII

THE CHRONOLOGY OF BONO MANSO

In this chapter and the next an attempt is made to synthesize the available information about Bono Manso. While this chapter focusses attention on the dating of the site, the next one is a summary and discussion of the results about the site. Here the chronology of Bono Manso is discussed on the basis of the following criteria:

1. Typology of excavated areas.
2. Cultural typological sequence.
3. Radiocarbon dates.
4. Oral traditions.

These will not be discussed in isolation; instead a cross-correlation will be made.

1. Typology of Excavated Areas

In Chapter V it was shown that two main types of mound could be detected at Bono Manso: low and high mounds with an intermediate type which is not as common as the first two. Surface collection of pottery and subsequent excavations have revealed that the low mounds are house sites relating to the early occupation of the site. At Area 245 the excavation of an intermediate mound has shown the absence of phase III occupation. Finally it has been shown that the high mounds in all cases have provided the 3-phase sequence of occupation at the site. It has been demonstrated in Chapter V that the heights and sizes of the mounds are related to the number of phases of occupation at the site, though one must make allowance for rate of destruction, nature and size of the original houses. On present evidence it is tempting to

suggest that the low mounds represent the earliest occupied areas of the site; the intermediate mounds have a longer history than the low mounds while the high mounds span the earliest through to the latest occupation of the site.

2. Cultural Typological Sequence:

(a) Stratigraphy and pottery sequence - Much has been said in Chapters V and VII about this and only a summary will be given here. None of the low mounds showed any evidence of initial abandonment and re-occupation; there was a continuous occupation of the areas concerned, though for how long is difficult to determine. This observation is equally applicable to the high mounds excavated at Areas 60, 104 and 245 though, as shown above, the occupation was in phases.

On the other hand the excavations at Area 159 have provided information on the utilization of the mound through time. Even though there is no direct evidence for a break in the occupation of the site, the stratigraphic evidence from the J24 section suggests that the inhabitants first used the depression as a rubbish dump, but that at a later stage this portion of the mound was put to domestic use, as is evidenced by postholes, bowl concentration and hearth features directly on top of the depression. However, judging from the cultural materials, both above and within the depression it appears that these changes were made by the same cultural group. As will be shown shortly below the radiocarbon dates obtained from both above and within the depression support the view that the change occurred after some few decades, possibly not more than a thirty years interval.

There is also evidence that important ceramic developments occurred at the site. During the phase I occupation there was an advance over the original phase I ware and this is clearly demonstrated in the J24 depression.

The fact that phases II and III pottery is completely absent in this depression, suggests that this late phase I deposit predates phases II and III though later than the typical phase I occupation such as found in Areas 139 and 171. It has also been stated earlier that the typical characteristics of the late phase I pottery such as smudging, burnishing, rounded lips and the tendency for vessel forms to assume gentler profiles than the typical angular phase I ware - were all continued into the phase II ware, though with new additions such as multiple decorations and medium cord and corn cob rouletting. It is also significant to note that though medium cord and corn cob rouletting are found together in phase II deposits mainly on phase II sherds, there is a spatial distribution at the site with regard to the two decorations. These two decorations are at their peak in the phase II context in Areas 60 and 159, decreasing very steadily in the phase III occupation. This frequency is however, quite the opposite in the Area 104 sequence. What does this suggest? It was noted in Chapter VII that some of the common vessel forms of phase II ware were acquired much later in Area 104 than in the other areas and also some of the non-pottery artifacts such as carved ivory bangles, brass scraps and iron bracelets which were distributed between the phase II and III deposits were found to have been acquired later in Area 104 than in Areas 60, 159 and 245. These observations suggest that of the four mounds excavated, Area 104 is younger than the other three. It is difficult to suggest which of the other areas is the earliest, though on the basis of the stratigraphical distribution of vessel forms 2 and 12 of phase II ware and the phase II smoking pipes, Areas 60 and 245 seem to be slightly earlier than Area 159.

(b) Imported pottery: Two imported potsherds were found associated with phase III pottery, one from Area 104 and the other from Area 159. In 1973 the former specimen was submitted to the Stoke-on-Trent City Museum for identification, and this showed that it was a piece of German salt-glazed stone ware which was manufactured in the second half of the eighteenth century A.D. In 1976 the latter specimen was submitted to the same Museum and the Director, Mr. Arnold Mountford, has kindly reported as follows:

"...the small fragment from Bono Manso is an example of salt-glazed stone ware made most probably during the first half of the 18th century. My first thoughts are that it originated in Westerwald, Germany, c.1720, but there are certain features which would not absolutely preclude the possibility of it having been made in Stoke-on-Trent, c. 1750. My leanings however are to the former though you will appreciate, it is extremely difficult to give a positive attribution because the sherd is so small."

These two dates seem to suggest that the phase III deposits in the two areas of 104 and 159 may not be earlier than 1700. On present evidence one cannot pinpoint the precise terminal date for this phase.

(c) Smoking pipes: As already discussed above, while phase I is a pre-pipe occupation, phases II and III contain pipes throughout. As will be discussed shortly below, the evidence from radiocarbon dates for the phase II occupation will appear to fall into the sixteenth century A.D. If this date is accepted, it will mean that the typical phase II pipes may be assigned to this date and therefore are earlier than the pipes found at the coast, a result which seems to tie in with the arguments adduced above on smoking pipes in the Bono Manso area. If one allows a working period of fifty years for a style to change into another (but see Ozanne, 1962), the following dates may be assigned, albeit tentatively, to the pipe typology described above, though one must caution that a particular style may be more or less conservative.

depending upon the tastes of the people concerned:

Phase II type	-	c. A.D. 1550-1600
Early Phase III type	-	c. A.D. 1600-1650
Late Phase III type	-	c. A.D. 1650-1700
Pipes post-dating Bono Manso	-	c. A.D. 1700-1750

It is of interest to note that at Amuowi II the typical phase II pipes are completely absent but the Early Phase III types have been found in a context which has produced a radiocarbon date falling between the sixteenth and seventeenth centuries a.d. (1610 $\pm$ 80 - N1802). Such a date may not be far from the range suggested above for the Early Phase III type.

3. Radiocarbon dates

The list on page 204 shows the radiocarbon dates obtained for the phases of occupation in the areas excavated at Bono Manso. From the calibrated dates provided, it appears that the typical phase I at Bono Manso may date between the thirteenth and fourteenth centuries A.D. There is a remarkable consistency in the dates obtained from the late phase I context in the J24 depression even though the dates were obtained from two separate laboratories. It is also interesting to note that the date above the depression is consistent with the view that the area was later occupied after the depression had been filled. On the whole the late phase I clearly lies between the fifteenth and sixteenth centuries A.D. It is significant to note that the calibrated date for the Ahwene Koko sample of a.d. 1595 $\pm$ 80 which has been noted above is A.D. 1493, and this tallies with those from the bottom of J24 depression which contains Ahwene Koko pottery. This suggests that the late phase I is contemporary with Ahwene Koko site.

The two dates obtained from the phase II deposits have not been in

Radiocarbon Dates from Bono Manso, 1973-1977

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AREA EXCAVATED	TYPE OF SITE EXCAVATED	SAMPLE TYPE	CONTEXT	LAB. NO.	C14 DATE B.P.	C14 DATE A.D.* (5568 HALFLIFE)	CALIBRATED DATE A.D.*
60	High mound	Composite charcoal	Phase III	N2491	240	1710 $\pm$ 75	1630
60	High mound	Composite charcoal	Phase II	N2490	420	1520 $\pm$ 75	1452
159	High mound	Composite charcoal	Phase II	B1n1729	315	1635 $\pm$ 30	1555
159	High mound	Composite charcoal	Late Phase I	N2628	335	1615 $\pm$ 70	1521
159	High mound	Composite charcoal	Late Phase I	N2629	385	1585 $\pm$ 70	1488
159	High mound	Composite charcoal	Late Phase I	B1n1728	430	1530 $\pm$ 30	1458
104	High mound	Composite charcoal	Phase I	N1803	570	1370 $\pm$ 75	1385
171	Low mound	Composite charcoal	Phase I	N2493	715	1235 $\pm$ 85	1297
Abam	Slag mound I	Composite charcoal	-	B1n1730	1630	320 $\pm$ 30	372

* The calibration was based on Clark, R.M. "A Calibration Curve for Radiocarbon Dates" (Antiquity, XLIX, Dec. 1975, pp. 251-261).

general agreement. There is a gap of about 100 years between them and it is suggested that one of them may be wrong. If we follow the calibrated dates, late phase I occurred around the late fifteenth century, so the sixteenth century date (Bln 1729) for the phase II is probably more correct than the fifteenth century one (N2490). However, one must point out that as already mentioned, Area 60 from where the latter date was obtained seems from all indications, to be earlier than Area 159 which produced the former date.

In any case the samples from the two areas were each associated with pottery which contained corn cob impressions. This crop is claimed to have been introduced into West Africa after A.D. 1500 (Willett, 1962), though an earlier date has been postulated (Jeffreys, 1953). In addition to being associated with pottery bearing maize or corn cob roulette decoration, the two samples were also each associated with smoking pipes which have hitherto been considered a post-A.D.1600 acquisition in Ghana (Ozanne 1962; Shinnie & Ozanne, 1962).

Do these results suggest a re-examination of the use of smoking pipes and corn cob impressions as chronological tools? In the case of the former I have suggested above that perhaps a good many of the pipes we get in archaeological contexts are not associated with tobacco after all (see also Lebeuf, 1962), thus neutralising the maximum value of such a dating tool. As already pointed out, nothing can be said about the question of corn cob roulette decorations at present, except to point out that the sixteenth century date (Bln 1729) is not inconsistent with the introduction of this crop to West Africa. Pending better independent dating indications for this phase of occupation, the writer's leanings are on the mid-sixteenth century date; the fifteenth century date seems, on present evidence, a little too early.

Only one date is available for the phase III context. Again if the calibrated date is used, a seventeenth century date seems inconsistent with the dates from written records which put the invasion of the Bono state in the early eighteenth century. However, an invasion does not necessarily imply a total abandonment. Nor is it impossible to get a house site which will be abandoned earlier than the final abandonment of the whole settlement. As already pointed out, this radiocarbon date came from Area 60 which I have not only considered as earlier than Areas 104 or 159, both of which produced the imported pottery, but also it is this same mound whose second phase of occupation is dated to the mid-fifteenth century by calibration. Indeed it is possible to argue that the mound excavated at Area 60 may have been both occupied and abandoned much earlier than any of Areas 104 and 159.

On the whole the evidence from corn-cob decorations, imported pottery and smoking pipes, seems to suggest that calibrated dates from the fifteenth century onwards are about fifty years or so too early. One must also bear in mind the general uncertainties about post-fifteenth century radiocarbon dates.

One other date which needs a comment is the one from the Abam iron-smelting site (Bln 1730). Before the arrival of the result of the radiocarbon analysis, the writer thought that the slag mounds were all associated with the life-time of the capital site. A date of about the fourth century A.D. seems on present evidence, unrelated to the foundation of Bono Manso. As was pointed out in Chapter V, Mound II which produced tiny sherds among which were phase I pottery, seems to have witnessed the main smelting activities. Indeed it is worth considering the fact that where a conducive environmental factor remains constant, pre-industrial societies are likely to utilize the particular niche for a long time. This observation may be applicable to the areas where the slag mounds at Bono Manso have been located. For, being close to streams,

these spots are likely to attract the smelting activities through time, especially since water is important in the smelting process. For this reason, even though the date here does not seem to relate to the capital, it is not unlikely, indeed it is probable, that some of the slag mounds belong to the life-time of Bono Manso. Future excavations will throw more light on this. In any case the evidence here suggests that iron-smelting at Bono Manso which is reflected in all the areas excavated by the presence of ironslag or iron objects, has a more distant ancestry.

4. Oral Traditions

Meyerowitz (1950:29) attempted a chronology of the Bono state based on the king and queen lists which she compiled. According to her;

"...the reigns of the kings were counted by small pieces of gold nuggets, each representing a year; those of the queen mothers by pieces of silver. These records were kept in kuduos - vessels of gold or brass - in the case of kings - and terracotta vessels in the case of queen mothers, and are still in existence today in the Nkondwa Fieso, the chapel of the stools at Takyiman, which was once the second largest city of the Bono kingdom".

By use of this mnemonic device Meyerowitz traced the beginning of the reign of the earliest Bono king, Asaman, to A.D. 1295.

Since 1970, however, many objections have been raised, not only to the list of kings and queen mothers but also to the very existence of the traditions of the use of this mnemonic device in the Bono state (Flight, 1970; Warren, 1970b). The present writer (Effah-Gyamfi, 1974) has also raised similar objections which are summarised below:

Firstly many of the adept oral informants, some of whom Meyerowitz claims she interviewed on this topic, denied any knowledge of such a device. For example the custodian of the Takyiman royal stools, Nana Kwame Twi, who was the custodian at the time of Meyerowitz's research, denied any knowledge of

the existence of such a reckoning device. Some of the informants, however claim to have hazy memories of such a tradition, but what is interesting is that they all explain that during the Asante invasion all the gold nuggets were looted and that thereafter the practice ceased. It is significant here to note that these informants add that the practice was known as adwasotoo (offering to the stools) and that it was not a reckoning device as such, suggesting that perhaps Meyerowitz had rationalised this into a mnemonic practice. What is clear however is that no such gold nuggets have existed at the Takyiman stool house, since the 1722-23 war. According to the stool custodian, only 8 stools have been in the stool chapel house since the nineteenth century when the bulk of the Takyiman people who fled to Gyaman (the present Ivory Coast) returned (see also Warren, 1970b).

Secondly at the request of the present writer all the key oral historians of Takyiman were consulted by the present Omanhene (paramount chief), nana Ameyaw Kwakye II and surprisingly only 7 kings and 10 queen mothers who reigned before the 1722-23 war were mentioned; the bulk of the names were those who ruled after the Asante invasion. The comments given about Meyerowitz's list by the oral informants are equally interesting. Among these are: 1) the difficulty in remembering the names of the rulers in a sequential manner, especially since many of the state drummers fled during the war and thus the custodians of the names of past rulers were lost; 2) that the original nnahaam (royal mausoleum) of the Bono kings was at Amoman but that after the war this settlement and others were ceded to Baffo to rule, hence all the stools belonging to the earlier rulers were lost; 3) that some of the kings possessed two names, one as the stool name and the other as title, so that two names may be referring to only one king; similarly a royal might be referred to as a king while in actual fact he never reigned.

These and other criticisms of the list prepared by Meyerowitz render her chronology highly suspect and as I have cautioned elsewhere, it should not be used without corroboration with other sources (Effah-Gyamfi, 1974, 113). Her date of A.D. 1295 for the foundation of the Bono state coincides almost perfectly with the earliest date for the phase I occupation (N2493, table 17 above), but this should be considered a mere coincidence.

5. Summary of Evidence

The picture that emerges from the discussion on the chronology of Bono Manso is that of a site which, as early as the fourth century A.D., was used by societies about whom little is known at present, but who were engaged in iron-smelting activities. The foundation of the capital would seem to have been between the late thirteenth and early fourteenth centuries A.D. On the basis of the size and distribution of house mounds and of the finds associated with them, the initial settlement would have been of a rural type which seemed to have witnessed a simple socio-political organisation, though there is evidence that a vigorous inter-regional trade was going on at the site. Between the late fifteenth and early sixteenth centuries A.D. the settlement seemed to have increased its contacts with the other neighbouring towns such as Ahwene Koko. That it was perhaps assuming a more urban status may be reflected in economic specialisation in the form of iron, textile, and copper/brass industries. Between the mid-sixteenth and early seventeenth centuries the settlement had reached its peak and it was marked by a compact, nucleated plan which, from the available evidence, reflects a general rise in trade and wealth and most probably of a greater political centralisation than in the previous periods. The town seemed to have witnessed a decline in size and, probably, population from about the late seventeenth century A.D.,

a situation which may reflect internal political instability, until the early eighteenth century when it was invaded by Asante. From the available archaeological information this invasion did not result in the total abandonment of the site, until about the mid-eighteenth century.

CHAPTER IX

SUMMARY AND DISCUSSION.

At the end of such a study it is important to summarize what contribution has been made towards understanding of early urban centres in Ghana.

I propose to divide the discussion that follows into two main parts: the first part is a summary of what information this study has provided about urban sites in Ghana, the second part deals with the problems which have been left unanswered and which need future investigation.

What we know about Bono Manso so far relates to the pre-colonial situation and conceptualisation of the people who inhabited the area. To begin with, in terms of density and size Bono Manso seems to have been pre-eminent. As has been shown earlier, its size is over double that of the other sites considered in the Takyiman oral traditions as next to it. Such an observation suggests that the Akan categorisation of '177' and '77' streets respectively is in harmony with the archaeological record. The figures may not mean anything more than a poetic expression of the Akan concept of settlement hierarchy.

The pre-eminence of Bono Manso can also be found in other respects. Almost all the key ancient routes remembered in oral traditions are said to have focussed on the capital. Also whereas the so-called aponkokwan (horses' path-ways) are found singly or are completely absent at other sites in the area, the evidence, both from oral traditions and archaeology, suggests that they were many at the capital site. One may argue that this reflects the degree of fieldwork done at the capital, but this is in fact not the case. Much care has been taken at other sites to check whether these pathways exist, with only minimal results. It seems that the number of pathways at the capital suggests a greater population than at any of the neighbouring settlements.

This leads to the question of population which is a difficult one, largely because there are many variables to be considered such as birth rate, death rate, migration and sex ratio. Takyiman traditions refer to an acute famine in the Bono state which led the king at Bono Manso, Brempong Katakya to elect to 'fight hunger' for 40 days by starving. On the 39th day he is said to have died. This tradition is interesting for it tells us of one of the factors which may cause emigration. Unfortunately nothing can be made of this because king lists in the Takyiman traditions are not sequential and, as has been pointed out earlier, they cannot help in dating accurately this event, except to suggest that since this famine immediately followed the Yabo (Gonja) war which preceded the Asante invasion, it is possible that it occurred in the sixteenth or seventeenth century A.D. The stratigraphies of the excavations at Bono Manso do not suggest any abandonment during the seventeenth century A.D.; on the contrary this period represents the peak of vigorous activity at the capital.

Archaeology cannot offer much about population at the capital except by inferences and intelligent guesswork. In Chapter VII I mentioned that if vessel form 15 of Phase I ware could truly be identified as a male bath-bowl then it would help in knowing the population of either the women or men in a house, though this would involve an areal excavation of a complete house mound. On present evidence nothing can be made of the population size based on vessel forms, except to suggest that their variability in the three phases of occupation suggests a continuity of various functions and aesthetic tastes at the site. It must be cautioned that the greater number of sherds in phase II does not tell much of population increase since many of the sherds belong to big vessels which produce more sherds if they are broken.

The best guide to population size may be found in the mound types. If one accepts that the bulk of the mounds at Bono Manso represents collapsed houses, one may get a rough estimate of the population. As already pointed out, Phase I ware is found everywhere at the site, suggesting that the whole area was occupied in the phase I occupation.

However, it has been shown above that within an area of 10,000 sq. metres representing a unit area of 100m^2 an average of four mounds will be found. Considering their small sizes, averaging 120 sq. metres, one may say that not more than five people would occupy one house. If 230 such units of 100m^2 are at the site, an ideal population of 4,600 would have occupied the site in phase I. If 10 per cent of these mounds is subtracted from this total as representing rubbish mounds and other negative areas, a total of 4,140 would seem to be a rough estimate for the population of the site in the phase I occupation. A similar calculation can be made of the phases II and III occupations. Mounds representing houses in these two phases were probably of swish as distinct from the wattle and daub structures found in the phase I occupation. These swish houses were bigger in size and much more compact than the phase I houses. Relating the distribution of pottery to the mounds an estimate of 132 and 98 of such 100m^2 unit areas could be demarcated for phases II and III occupations respectively. Using an average mound size of 450 sq. metres to represent a house with an average of 10 inmates, it is possible to work out the ideal population size, and if 10 per cent of this population is again allowed for non-house mounds, already abandoned house mounds and other negative areas, it is possible to arrive at a rough estimate of the population during the two upper phases of occupation, as being 10,000 for phase II and 7,938 for phase III.

The above figures are no more than estimates, and no account has been taken of other population variables such as birth and death rates, food supply, epidemics, and migrations.

Nevertheless a few inferences, may be drawn from these highly tentative figures. Firstly, even though the whole area of the site was occupied in the phase I occupation, the population was still small, reflecting the presence of less compact, more dispersed type of settlement. The analysis of the finds seems to suggest however, that towards the end of this phase, between the fifteenth and sixteenth centuries A.D., the population had expanded considerably.

The peak of Bono Manso would seem to have been reached during the second phase of occupation. The increase in population is in line with the archaeological record which shows that not only were the advanced traits in pottery manufacture carried over from the late phase I occupation, but also more techniques were employed such as medium cord and corn cob roulette decorations. In addition to this, concrete-textured ware assumed different decorations and also the highly ornamented smoking pipes started coming in. The fact that almost all the Areas which revealed this phase of occupation had the phase I deposit below it without any indications of abandonment (except Area 159), suggests that the population increase did not result from a sudden immigration of people, though it is quite likely that a steady movement of new people with new ideas occurred during this phase.

That the town and its population shrank in size in the phase III occupation is difficult to explain. What is clear however is that the wealth and high standard of living experienced in the second phase was carried over into this phase too, even with new additions such as vessels with sparkling mica with curvilinear grooves and different varieties of smoking pipes. Perhaps if one turns to oral traditions about the capital it will be possible to explain this population decrease.

Only two items of oral information on population may be relevant here. The first one which has been noted above shows that there was a famine, probably during or immediately after the Yabo (Gonja) war which resulted in Brempong Katakya's heroic death. According to the local traditions this war occurred 'long before' the Asante invasion of the capital, suggesting a date between the sixteenth and seventeenth centuries A.D. which seems to agree with the Gonja wars of expansion (Goody, 1964).

The second story is concerned with the political situation at the capital. On the eve of the Asante invasion, owing to succession disputes, the avarice of the king and the atrocities perpetrated by some of the royals, many of the inhabitants are said to have migrated to other areas, particularly the coast (Effah-Gyamfi, 1975b, 1976a). It is suggested that these two items of information which can be strong reasons for emigration might have been connected with the phase III occupation which may fall within the seventeenth and eighteenth centuries A.D. However, the

archaeological work has shown that during this period there was a shift in the regional contacts with this area, from the northern sector to the southern sector. This shift would seem to represent a disruption in the economic advantages earlier enjoyed in this area. Such a situation could have contributed to internal political instability.

Work done so far has not revealed any wall around Bono Manso. Oral traditions on this seem to suggest that it was only the king's palace which had an earthen wall. The palace, said to be the largest house at the capital, is claimed to have contained many quarters including the court and those of the servants, wives, cooks, artisans and guards. Meyerowitz (1962a:169) and Anquandah (1965:120) were shown a baobab tree (Adansonia digitata) which is claimed to have stood in front of king Ameyaw Kurompeh's palace (see unit Area 158 in fig.5). Though large and extensive mounds are found here, one of which was excavated in Area 159, there seems to be a confusion as to the truth about this location. As explained elsewhere (Effah-Gyamfi, 1974,p.145), the present writer was shown the same baobab which was associated, this time, with king Ameyaw Kwakye I. One must be cautious in associating a particular feature with a particular king. For as the traditions have it, all the successive kings at Bono Manso had only one palace, a practice which is still found at Takyiman, the successor of Bono Manso.

It is relevant however to point out that the oral traditions mention the use of wooden mpampim (pallisade) at Bono Manso, though the oral informants are not in agreement as to whether this was found all around the capital or only at the entrances leading to the town. All the informants agree however, that it was a protective device. If such a device was in operation at Bono Manso, the accidents of preservation would not permit an archaeological reconstruction.

The morphology of the town seems to have been closely related to both the water requirements and political development. As noted in Chapter V, it appears that water was a very important factor for the location of the town. The facts that in the initial stages of the settlements the houses were scattered everywhere within the confines of the site, and that

later compact houses were concentrated in the centre of the site may reflect socio-political changes. I have already suggested that between the thirteenth and fourteenth centuries A.D., the inhabitants might have been organized into a loose political unit which developed into a stronger political authority between the fifteenth and sixteenth centuries, a phenomenon which might have affected the morphology of the town.

The most prominent alien trading settlement remembered in the oral tradition is that of Kramokrom. Unlike Begho where the alien settlers were living at the same site, though in a distinct quarter, at Bono Manso the alien settlement was found about 4km from the capital. Indeed the pottery analysis has not shown any evidence of distinct quarters. This latter observation is important because as with Begho even if aliens settled at the capital, in view of the bulky nature of earthenware, the aliens would prefer to adopt the local pottery, especially if their number was small and women, who were invariably the potters, were not among them. That there was probably no alien quarter at Bono Manso may be explained by the oral tradition which says that the first aliens to trade at Bono Manso met the king who was worshipping a deity by spilling blood on it. Much as they tried to convince the people away from this practice, they were unsuccessful since all the inhabitants followed their king. In order to escape from both this practice which conflicted with their religion but at the same time have access to trading activities in the area, the aliens founded Kramokrom far removed from the town proper. This story suggests that whereas Bono Manso was ethnically homogenous, the indigenous population at Begho was either less than or of the same number as the aliens.

Archaeology has not provided direct evidence of trade at Bono Manso. Yet there are objects and features which point to strong contacts with people outside the Bono Manso area which may suggest exchange of ideas or goods. In the first place, the constant mention of aponko (horses) in the traditions seem to suggest that Bono Manso had close contacts with the savanna lands to the north and north-west where horses are more common. It is possible that the Mande, who came to the Bono Manso area brought this cultural trait, especially since the word ponko is a Mande loan-word (Wilks, 1962).

As Ozanne (1962) and Posnansky (1973c) have suggested, vessel Forms 11 and 12 of Phase II ware, and Form 11 of Begho ware which was found in the late phase I context, suggest local imitations of metal prototypes which might have been trade items brought to the Bono Manso area. Some of these ancient brass bowls are still, or until recently, found in the Bono Manso area at Sikaa, Kagbrema and Bono Manso. All these brass bowls have been highly venerated and ritualised as having come from heaven. Brass bowls still found in the Begho area are treated in the same way. All these items of evidence suggest the vigour of trading activities, particularly with the Middle Niger area. The context in which these earthen imitations of metal prototypes were found permits us to suggest that the peak of this Middle Niger trade was probably between the fifteenth and sixteenth centuries A.D. Until the late seventeenth and early eighteenth centuries A.D. when we have glimpses of European trade, there is nothing from the archaeological record to suggest an earlier European or coastal contact.

The regional trade was equally strong at Bono Manso. As shown in Chapter VII there is sufficient evidence to suggest regular contacts between Bono Manso and Begho, New Buipe and Ahwene Koko from phase I to phase III occupations. And just as the international trade, contacts between Bono Manso and areas further south seem to have become distinct only in the seventeenth and early eighteenth centuries A.D. It appears therefore that by its location, being in the middle part of Ghana, Bono Manso became a pendulum between the two poles of trading activities in the history of modern Ghana, swinging to the northern sphere between the thirteenth and sixteenth centuries A.D., and then to the southern sphere during the seventeenth and eighteenth centuries A.D.

Apart from regular regional and international trade, local industries were present in the form of weaving, brass-casting and iron-working. So little is known of these industries at Bono Manso that it is difficult to tell whether they were a by-product of trade or were locally invented. What is clear however is that these three industries were being practised at least as early as the fifteenth century A.D. at Bono Manso, and iron-working for instance was, on present evidence, a much earlier industry

before the capital came into being. So far the Abam iron-working site at Bono Manso is the second earliest evidence for this technology in Ghana, the first being Dapaa in the Begho area which dates to the second century A.D. (Posnansky & McIntosh, 1976).

Archaeology has provided no direct answer to the question of ethnic composition at the capital. What we do know, from oral traditional and archaeological inferences, that even though aliens were in the area, many of them did not stay directly at Bono Manso. The cultural stratigraphies have also shown that there was no abandonment and reoccupation by an immigrant population. The pottery sequence has indicated that while Phases I and III wares are close to each other, Phase II ware portrays a combination of late Phase I elements and new ideas. I have already suggested that this may reflect either the coming in of new people interacting with the local people and therefore providing a modified pottery tradition, or that at the height of her trading activities the inhabitants at Bono Manso had so much grown both in size and wealth that demand for vessels became very high. This demand would seem to have been met by a new group of people who would probably try to satisfy the tastes of the local inhabitants. In view of the fact that Phase II ware is close to Begho ware which Crossland (1973) has shown is ancestral to the present Mo ware, and the fact that local traditions refer to some Mo immigrant groups in the Bono Manso area, it may be suggested that the changes in pottery tradition were a reflection of the coming of these people, whose women are widely claimed in the local traditions as potters.

The pottery sequence does not suggest any replacement of an earlier culture group, but a continuity of a tradition and a reflection of the political, social and economic dynamism of the population concerned. Whether the bulk of population was Akan is extremely difficult to tell from the archaeological record. The burials excavated from Bono Manso show a continuity in terms of both the orientation and bowl association. Traditions from this area and other Akan areas have accounts of ancient burial practices of their ancestors which are in agreement with the burials excavated at Bono Manso.

The evidence for brass-casting in the form of brass scraps and crucibles which may be associated with the famous Akan gold trade, is too circumstantial to be of any value in associating the inhabitants of Bono Manso with Akan. However, as I have discussed elsewhere (Effah-Gyamfi, 1974:310), surface finish of pottery seems to be one of the important cultural markers in Ghanaian prehistory. While the areas north of Bono Manso reveal pottery with predominant red-slipping, either alone or in combination with burnishing (Davies, 1964; Mathewson, 1968; York, 1973; Crossland, 1973), this is the opposite in all the sites excavated in modern Akan areas of Ghana, which show negligible red-slipping but large quantities of either handsmoothed or smudged and burnished pottery. Again in terms of decoration a similar picture emerges, in which the areas north of Bono Manso are characterised by various forms of rouletting and combstamping while the predominant decorations south of this capital site are grooving and incision. Based on these observations and the results of the pottery analysis in Chapter VII, one would place Bono Manso within the southern pottery group which may roughly coincide with the early Akan settlements. Indeed the Bono Manso area may serve as a boundary between the early pure Akan cultural group to the south and the early non-Akan and mixed-Akan to the north and northwest respectively. It is interesting to note that this ethnic pattern has not changed significantly in modern Ghana. Also the fact that linguistic evidence has shown that the Bono dialect, of which Takyiman area seems to be the earliest, is more akin to proto-Akan than Asante or Akuapem may lend support to the suggestion that the inhabitants of Bono Manso whose descendants are, without doubt the Takyiman people, were Akan. However, quite unlike other writers such as Meyerowitz (1950), the present writer would hesitate to label the Bono Manso area as the cradle of Akan civilization, but instead caution for more archaeological data from other Akan areas before any comparison can be made. Although Bono Manso may be considered as an Akan town with a vigorous hinterland in pre-colonial sense, its position among other early Akan towns can best be judged when the others have been studied.

This study has demonstrated the utility of pottery wares as chronological indicators and has shown that many sites in the area can be

seriated through the use of such a pottery sequence, a happy sign for archaeologists who want to study state-forming processes. The comparative materials from the Begho, New Buipe and Ahwene Koko areas have assisted in understanding the regional context of Bono Manso. It has also demonstrated that the value of pottery as a cultural marker still stands unchallenged. It has now been found that even if shape may be a cross-cultural feature, a combination of attributes such as rim form, lip form, decorations and surface finish can go a long way in demarcating an archaeological culture group.

This study has also shown two areas which need an archaeological re-examination. The first is the question of design-painting as an attribute for cultural differentiation. There is a need to find other attributes and also source(s) of this pottery tradition. Perhaps we have over-generalized the value and source(s) of this tradition, and it has been suggested above that a combination of attributes be used in assessing it. The second area of re-examination is on the use of corn cob and smoking pipes as chronological tools in Ghana. The evidence above would seem to suggest that the hitherto traditional lower limit of the seventeenth century A.D. may need a push further back to about the mid-sixteenth century A.D. in the Bono Manso area in particular. Indeed a generalisation can only be made for these "type fossils" when they have been adequately studied in their different regional contexts.

The writer does not claim to have answered all the problems connected with this study. Indeed many more questions have been raised than have been solved. In the first place, there are important areas of research which have had only the surfaces scratched. Intensive studies of the sacred sites which have produced Early Food Producing materials, will need to be conducted if one can understand more fully some of the Ghanaian myths of origin and their relevance to the whole question of Akan origins. As noted above, the fact that pottery from Amuowi I dating to the fifth century A.D. is akin to Phase I pottery at Bono Manso, and that Phase I sherds have been associated with a stone-tool factory site at Nyinase, coupled with the date of the fourth century A.D. for an iron-smelting mound, whose counterpart has

produced a few Phase I sherds - all go to suggest the possibility of there being an ancestral group in the area akin to the early inhabitants of the capital, about whom we can only know more through further investigations.

A study of the pottery associated with the Kintampo Industrial sites reveals striking differences from those associated with the Phase I occupation in the Bono Manso area. For example, while the typical Phase I pottery is light and has angular rim-neck profiles with irregular grooving as the main decoration, the sherds associated with the Kintampo Industrial Tradition are heavy, and have grog as paste, with gently flowing profiles and red-slip is found on the bodies and lips of the vessels. They are decorated mainly with horizontal comb and walking comb impressions. These differences are significant enough to suggest that even though some groups of the Kintampo Industrial Tradition were living in the Bono Manso area they were not ancestral to the dominant group which produced the Phase I pottery. However, a look at the pottery associated with the sacred hole of Bonoso where the ancestors of modern Wankyi are said to have emerged, shows that they are fairly similar to the pottery found with the Kintampo Industry in terms of form and decoration and it appears that a continuity of pottery tradition is apparent, though these similarities may be merely superficial.

Archaeology has not only failed to locate any market area at Bono Manso but it has also not provided any information on the nature of the market at the capital. At Takyiman an area of about 10,000 sq. metres was found strewn with laterite boulders and devoid of mounds and pottery. This area is claimed in the oral traditions as the earliest market in the Bono state. Such an account presupposes that Bono Manso did not have a market though another version asserts the presence of it at Bono Manso. Whether this so-called market area at Takyiman pre-dates Old Takyiman site is a question which only future work will be able to solve.

It is however, the hope of the writer that the study at Bono Manso will be followed by archaeologists interested in urban development in pre-colonial Ghana, and that the information provided will help in filling some of the important gaps in our understanding of early urban sites in Africa.

BIBLIOGRAPHY

- Afeku, I.K.
1976 A Study of Smoking Pipes from Begho. B.A. Dissertation, University of Ghana.
- Agorsah, E.K.
1973 The Prehistory of the Begho Area. Institute of African Studies Seminar Paper.
- Anquandah, J.R.
1965 Archaeological Survey of the Techiman-Wenchi Area in Ashanti and the Northwest, a special issue of the Institute of African Studies Research Review, 1, 111-135.
1976 Boyasi Hill - A Kintampo Culture Site. Sankofa, 2, 92.
- Beck, H.C.
1928 Classification and Nomenclature of Beads and Pendants. Archaeologia, 77, 1-76.
- Bellis, J.O.
1972 Archaeology and the Culture History of the Akan of Ghana: A Case Study. Ph.D. Dissertation, Indiana University.
- Boachie-Ansah, J.
1978 An Archaeological Contribution to the History of Wenchi. M.A. Thesis, University of Ghana.
- Boahen, A.A.
1966 The Origins of the Akan. Ghana Notes and Queries, 9, 3-10.
1974 Who Are the Akan? Colloque Inter-Universitaire Ghana-Côte d'Ivoire, Bondoukou.
1975 Ghana: Evolution and Change in the Nineteenth and Twentieth Centuries. London.
- Boateng, E.A.
1954 The Study of Human Settlements. Universitas, 1, 16-18.
- Bowdich, T.E.
1819 Mission from Cape Coast Castle to Ashantee. London.
- Bravmann, R.A.
1974 Islam and Tribal Art in West Africa. Cambridge.

- Calvocoressi, D.S.
1970 A Funerary Site at Adansi Ahinsan. West African Archaeological Newsletter, 12, 82-83.
- Chittick, H.N.
1968 Kilwa: An Islamic Trading City on the East African Coast. Nairobi.
- Connah, G.
1975 The Archaeology of Benin. Oxford.
- Crossland, L.B.
1973 A Study of Begho Pottery in the Light of Excavations Conducted at the Begho B2 Site. M.A. Thesis, University of Ghana.
- 1975 Traditional Textile Industry in North-West Brong-Ahafo, Ghana - The Archaeological and Contemporary Evidence. Sankofa, 1, 69-73.
- 1976a Excavations at the Nyarko and Dwinfour Quarters of Begho - 1975. Sankofa, 2, 86-87.
- 1976b Interim Report on Begho Pottery. West African Trade Project Report, Department of Archaeology, University of Ghana, 36-53.
- Daaku, K.Y.
1966 Pre-Ashanti States. Ghana Notes and Queries, 9, 10-13.
- Daaku, K.Y. and
A. van Dantzig
1966 An Annotated Dutch Map of 1629. Ghana Notes and Queries, 9, 14.
- Daget, J. and
Z. Ligers
1962 Une ancienne Industrie Malienne: Les pipes en terre. Bulletin de l'IFAN, Series B, XXIV, 12-52.
- Davies, O.
1955 Excavation at Mampongtn.
- 1962 Neolithic Cultures of Ghana. Proceedings of the Fourth Pan African Prehistory Congress, ed. Mortelmans and Nenquin, 291-302.
- 1964 Gonja Painted Pottery. Transactions of the Historical Society of Ghana, 11, 4-11.
- 1967 West Africa Before the Europeans. London.

- 1972 Field Notes III. Legon.
- Dickson, K.B.
1970 Urbanisation in Pre-Colonial Ghana. Annual Museum Lectures, Accra, 39-49.
- Dolphyne, F.
1973 Brong (Bono) dialects. Institute of African Studies Seminar on Brong. Legon.
- Dombrowski, J.
1976 Mumute and Bonoase - Two Kintampo Sites. Sankofa, 2, 64-71.
- Effah-Gyamfi, K.
1974 Oral Tradition and Archaeology: A Case Study of the Bono State. M.A. Thesis, University of Ghana.
- 1975a Traditional History of the Bono State: An Archaeological Approach. Legon.
- 1975b Aspects of the Archaeology and Oral Traditions of the Bono State. Transactions of the Historical Society of Ghana, XV, 217-227.
- 1976a King Amuyaw Kwakye of Tekyiman Universitas (new series), 5, 233-237.
- 1976b The Archaeologist and the Ghanaian Hunter. Sankofa, 2, 72-78.
- 1977 Archaeology and Akan Traditions of the Hole and Cave Dwellings: The Case of Amuowi I and Gyamma (unpublished MS).
- Flight, C.
1968 Radiocarbon dates from Ghana: Kintampo Series. Institute of African Studies Research Review, 4, 105-107.
- 1970 The Chronology of the Kings and Queen-mothers of Bono Manso: A Revaluation of the Evidence. Journal of African History, XI, 259-268.
- Fynn, J.K.
1975a Who are the Fante? Institute of African Studies Seminar Paper.
- 1975b The Pre-Borbor Fante States. Sankofa, 2, 20-31.

- Garrard, T.F.
1975 Pottery and Stone Goldweights from Ghana. Sankofa, 1, 60-67.
- Gifford, J.C.
1960 The Type-Variety Method of Ceramic Classification as an Indicator of Cultural Phenomena. American Antiquity, 25, 341-347.
- Goody, J.C.
1954 The Ethnography of the Northern Territories of the Gold Coast West of the White Volta. London.
- 1964 The Mande and the Akan Hinterland. The Historian in Tropical Africa. London, 193-216.
- 1965 Introduction to Ashanti and the North-West. Special issue of Institute of African Studies Research Review.
- Guy, G.L.
1967 Notes on Some Historic Baobabs. Rhodesiana, 16, 17-26.
- Hutton, W.
1821 Voyage to Africa. London.
- Irwin, G.W.
1961 The Origins of the Akan. Universitas, IV (5), 138-141.
- Jeffreys, M.D.W.
1953 Pre-Columbian Maize in Africa. Nature, CLXXII, 965.
- Kiyaga-Mulindwa, D.
1976 Archaeological and Historical Research in the Birim Valley. Sankofa, 2, 90-91.
- Kwamina-Poh, M.A.
1973 Government and Politics in the Akuapem State, 1730-1850. London.
- Lamb, H.A. and
R.N. York
1972 A Note on Trade Beads as Type-Fossils in Ghanaian Archaeology. West African Journal of Archaeology, 2, 109-113.
- Lebeuf, J.P.
1962 Pipes et Plantes á fumer chez les Kotoko. Notes Africaines, 93, 16-17.

- 1963 Prehistory, Protohistory and History in Chad. Journal of the Historical Society of Nigeria, 2, 593-601.
- Levtzion, N.
1968 Muslims and Chiefs in West Africa. Oxford.
- Livingstone, D. and
C. Livingstone
1865 Narrative of an Expedition to the Zambezi and its Tributaries. London.
- Mathewson, R.D.
1968 The Painted Pottery Sequence in the Volta Basin. West African Archaeological Newsletter, 8, 24-31.
- Mathewson, R.D. and
C. Flight
1972 Kisoto Bowls: A Fifteenth and Sixteenth Century Pottery Type in Northern Ghana. West African Journal of Archaeology, 2, 81-92.
- McIntosh, R.J.
1974 Archaeology and Mud-Wall Decay in a West African Village. World Archaeology, 6, 154-171.
- 1975 Archaeological Studies in Mud-Wall Architecture: With Special Reference to West Africa. Unpublished M.A. thesis, Cambridge University.
- 1976 Finding Lost Walls on Archaeological Sites. Sankofa, 2, 45-53.
- Meyerowitz, E.L.R.
1949 The Sacred State of the Akan. London.
- 1950 Akan Traditions of Origin. London.
- 1958 The Akan of Ghana: Their Ancient Beliefs. London.
- 1960 The Divine Kingship in Ghana and Ancient Egypt. London.
- 1962 At the Court of an African King. London.
- 1974 The Early History of the Akan States of Ghana. London.
- Nunoo, R.B.
1957 Excavations at Asebu. Journal of West African Science Association, 3, 12-44.

- Ojo, G.J.A.
1966 Yoruba Culture. London.
- Owen, J.
1974 A Contribution to the Ecology of the African Baobab. Savanna, 3(1), 1-14
- Ozanne, P.C.
1962 Notes on the Early Historic Archaeology of Accra. Transactions of the Historical Society of Ghana, VI, 51-70.
- 1976 Tobacco Pipes from Accra and Shai. Institute of African Studies, Legon.
- Pole, L.M.
1975 Iron-Working Apparatus and Techniques: Upper Region of Ghana. West African Journal of Archaeology, 5, 11-39.
- Posnansky, M.
1971 Ghana and the Origins of West African Trade. Open Lecture, University of Ghana, Legon.
- 1973a Aspects of Early West African Trade. World Archaeology, 5, 149-162.
- 1973b The Early Development of Trade in West Africa: Some Archaeological Considerations. The Ghana Social Science Journal, 11 (2), 1-14.
- 1973c Archaeological Aspects of the Brong Ahafo Region. Institute of African Studies Seminar Paper on the Brong, Legon.
- 1975 Archaeology, Technology and Akan Civilization. Journal of African Studies, 11(1), 25-38.
- Posnansky, M. and
R. McIntosh
1976 New Radiocarbon Dates for Northern and Western Africa. Journal of African History, XVII(2), 161-195.
- Prussin, L.
1973 The Architecture of Djenne: African Synthesis and Transformation. Ph.D. thesis, Yale University.
- Quaye, I.
1972 The Ga and their Neighbours, 1600-1745. Ph.D. thesis, University of Ghana, Legon.

- Rattray, R.S.
1923 Ashanti. Oxford.
- 1927 Religion and Art in Ashanti. Oxford.
- 1929 Ashanti Law and Constitution. Oxford.
- Reindorf, C.C.
1895 The History of the Gold Coast and Asante. Basel.
- Shaw, C.T.
1960 Early Smoking Pipes in Africa, Europe and America. Journal of the Royal Anthropological Institute, 90, 272-305.
- 1961 Excavation at Dawu. Edinburgh.
- Shepard, A.O.
1965 Ceramics for the Archaeologist, 5th ed. Washington.
- Shinnie, P.L. and
P.C. Ozanne
1962 Excavation at Yendi Dabari. Transactions of the Historical Society of Ghana, VI, 87-118.
- Stride, G.T. and
C. Ifeka
1971 Peoples and Empires of West Africa. Nelson.
- Swart, E.R.
1963 Age of the Baobab Tree. Nature, 198, 758.
- Ward, W.E.F.
1958 A History of Ghana. London.
- Warren, D.M.
1970a Disease, Religion and Art Among the Takyiman-Brong.
Ph.D. Thesis, Indiana University.
- 1970b A Reappraisal of Mrs. Meyerowitz's Work on the Brong. Institute of African Studies Research Review, Legon, VII(1), 53-76.
- Warren, D.M. and
K.O. Brempong
1971a Techiman Traditional State: Stool and Town Histories. Legon.
- 1971b Techiman Traditional State: Histories of the Deities. Legon.

- Wilks, I.
1961 The Northern Factor in Ashanti History. Legon.
- Willett, F.
1962 The Introduction of Maize into West Africa: An Assessment of Recent Evidence. Africa, XXXII(1). 1-13.
- York, R.N.
1973 Excavations at New Bupe. West African Journal of Archaeology, 3, 1-189.



Plate I - A high mound at Bono Manso (area 104)

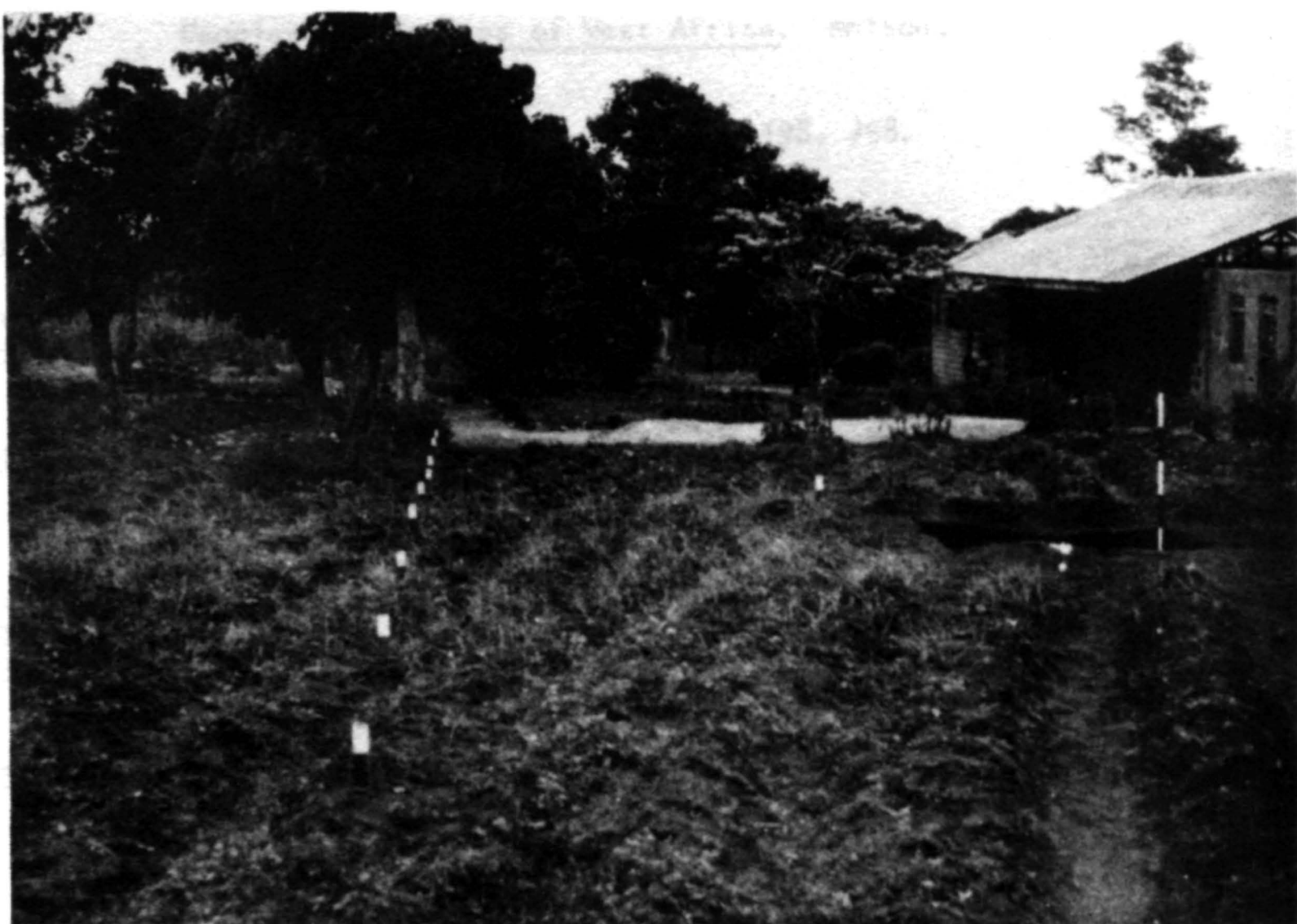


Plate II - A low mound at Bono Manso (area 139)



Plate III - A section of the Aponkokwan
(Horses' Pathway)

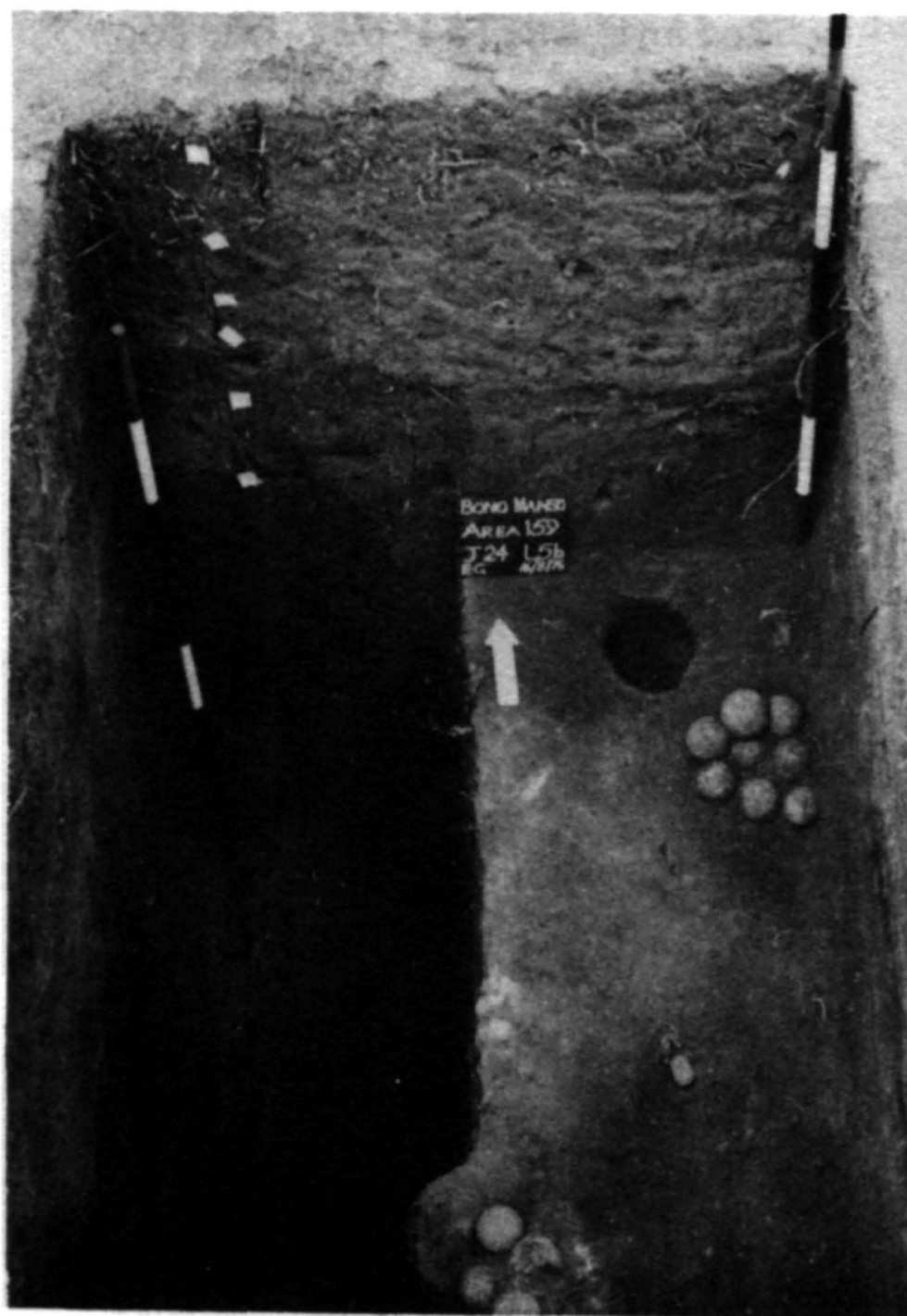


Plate IV - Area 159, J24: bowl concentration
with depression below

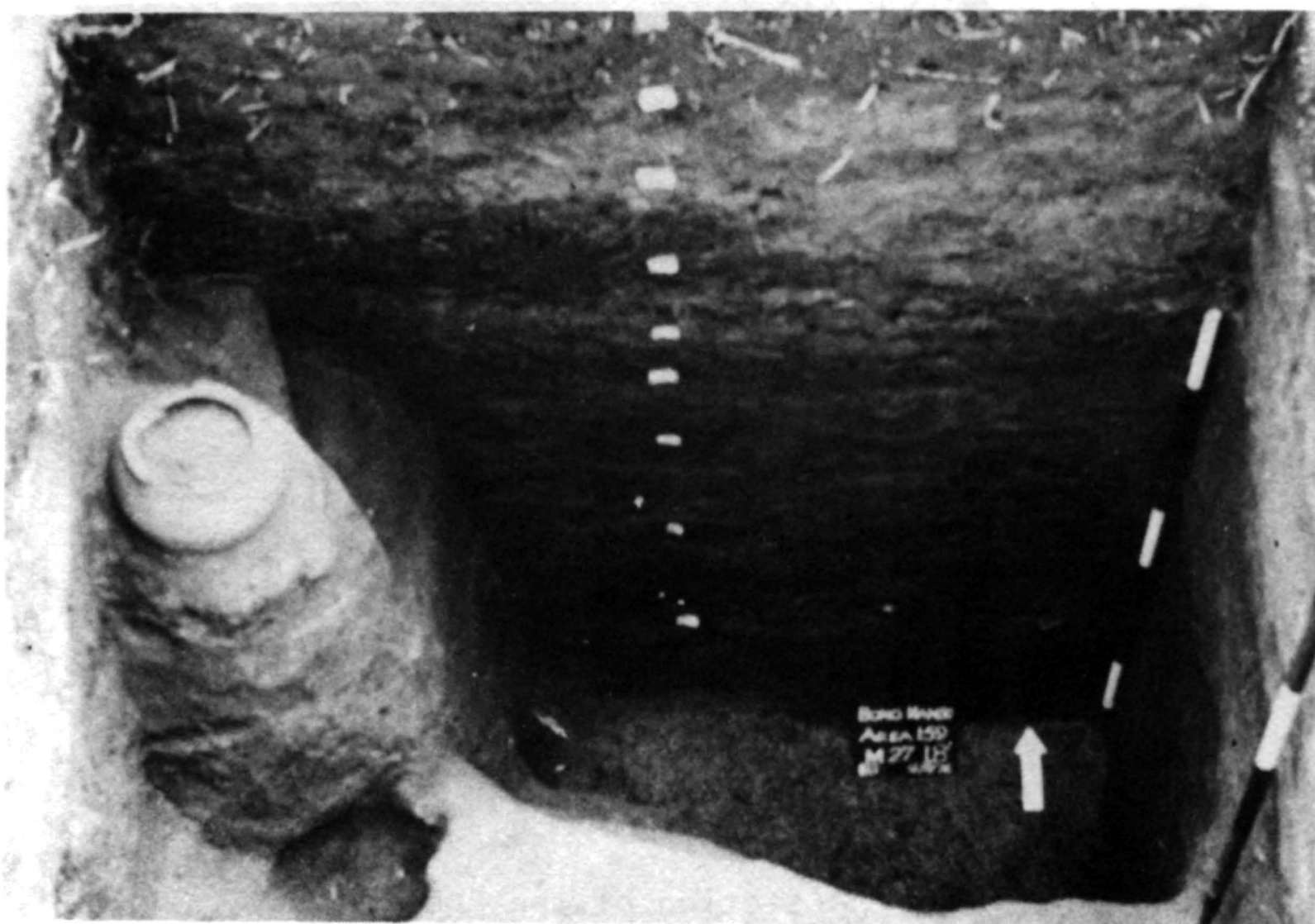


Plate V - Area 159, M27: a cistern with an infant burial pot on top

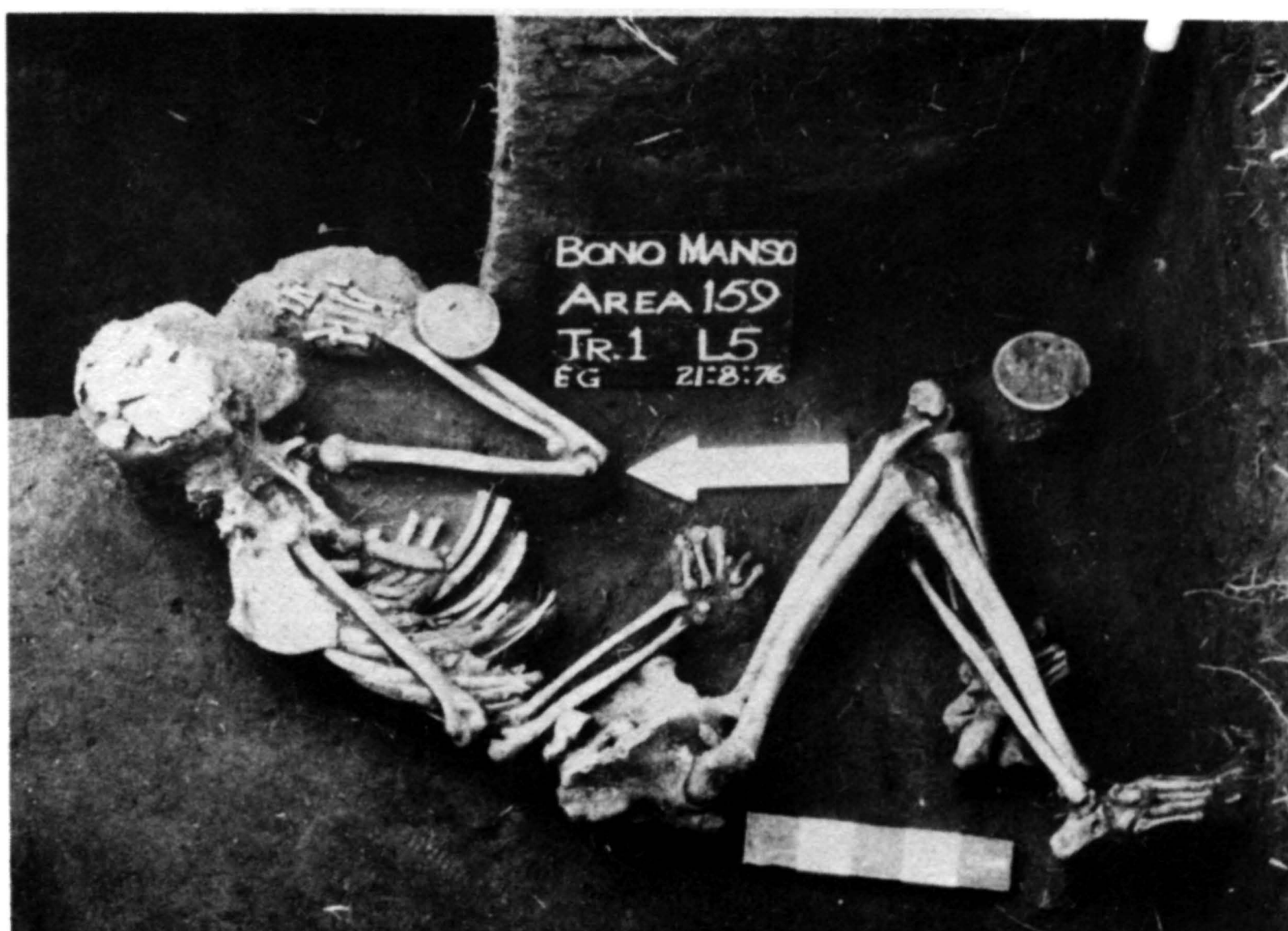


Plate VI - Area 159, Trench 1: an adult female burial



Plate VII - Area 159, Trench II: an adult female burial



Plate VIII - Area 245: pit A24